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ANALYSIS OF RECRUIT ATTRITION FROM THE NAVY'S DELAYED ENTRY PROGRAM AND RECRUIT TRAINING COMMAND

by

Jon K. Neuhalfen

December 2007

Co-Advisors: Mark J. Eitelberg
Stephen L. Mehay

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This thesis analyzes demographic and assignment factors associated with recruit attrition from the U.S. Navy’s Delayed Entry Program (DEP) and Recruit Training Command (RTC). These factors include education credentials, enlistment programs, and women in traditional ratings. The Navy currently screens applicants using three qualification “tiers” based on education credentials. Armed Forces Qualification Test (AFQT) scores are cross-referenced with education tier to create the Navy’s Recruit Quality Matrix, which determines enlistment eligibility. The analysis uses the PRIDE database, provided by Commander, Navy Recruiting Command. Trend analyses are used to identify significant changes in enlistment and attrition behavior for recruits who joined from fiscal years 1998 through 2005. Probit regression models are also constructed using these data to identify differences in attrition probabilities.

Results show that education credential, time in DEP, gender, marital status, AFQT score, enlistment program, and Navy Recruiting District are significant factors affecting DEP attrition. Analyses of RTC data indicate similar factors are significant when predicting RTC attrition.

A tool for screening applicants based on education credential, AFQT score, and age is designed to more accurately predict RTC attrition. Further research is recommended to conduct similar analyses on attrition throughout the first term, and on individual Navy Recruiting Districts.

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ANALYSIS OF RECRUIT ATTRITION FROM THE NAVY’S DELAYED ENTRY PROGRAM AND RECRUIT TRAINING COMMAND

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Lieutenant Commander, United States Navy
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Submitted in partial fulfillment of the
requirements for the degree of

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I. INTRODUCTION

A. BACKGROUND

The Navy’s recruiting and accession process relies on the Delayed Entry Program (DEP) to effectively manage recruits’ initial training timelines and fleet manning. The DEP allows new recruits to delay their entry into active duty service for up to fifteen months. A recruit may opt to postpone entry for a variety of reasons, including: the availability of specialized training billets, a recruit’s personal preferences, or completion of high school. Persons who enter the DEP, but do not make it to recruit training, are considered DEP “attrites.” DEP members may voluntarily renege on their decision to join the Navy, or they may be involuntarily discharged for various reasons. Because this attrition occurs before entry onto active-duty service, the costs related with DEP attrition are lower than costs that would have been incurred had the attrition happened while on active-duty. At the same time, each recruit lost from the DEP must be replaced, resulting in the expenditure of additional resources and renewed efforts by recruiters.

Persons who complete their time in DEP are begin active-duty service and are sent to the Navy’s Recruit Training Command (RTC) at Great Lakes, Illinois. Recruit training, also known as “boot camp,” is scheduled for eight weeks and ends in graduation for most, although some recruits will again be discharged before completing the course. The goal of this training is to transform new recruits from civilians into sailors, with all of the skills necessary to perform in the fleet. The training includes physical fitness, seamanship, firearms, firefighting and shipboard damage control, lessons in Navy heritage and core values, teamwork, and discipline.[1] Upon graduation, the new recruit may either proceed to skills training (referred to as A-School) or directly to the fleet (if no skills training is required). If the individual attrites, he or she is sent home.

1. Education

Many previous studies have shown that education is an important predictor of a recruit’s likelihood to successfully complete the early stages of military service. Historically, for example, recruits who possess a high school diploma or have attended college are much less likely than their counterparts without a diploma or college credits to be discharged from RTC or voluntarily leave DEP. In the 1980s, a three-tiered education classification system was developed to group various levels or types of education according to their associated probability of first-term attrition. Based on this system, applicants in Tier I were predicted to have the lowest probability of attrition, while those in Tier III had the highest. The tiers included the following education levels and credentials:[2]

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[1] Recruit Training Command Great Lakes, Illinois, What to Expect, http://www.nstc.navy.mil/rtcgl/recruits/training.html (Accessed December 6, 2007).

[2] Janice H. Laurence, Peter F. Ramsberger, and Jane Arabian, Education Credential Tier Evaluation, (Alexandria, VA: Human Resources Research Organization, 1997), 2.

- Tier I – High school diploma and higher, and no high school diploma with at least one semester of college;
- Tier II – Test-based equivalency diploma, high school certificate of attendance, adult education diploma, correspondence school diploma, occupational program certificate, and home school diploma; and
- Tier III – Non-high school graduates without alternative credentials.

Several changes have been made since the original three-tiered system was created. As of 2007, adult education diploma graduates, home school graduates, and people who completed requirements for traditional high school graduation, but failed their mandatory exit exam, are also classified with Tier I. National Guard Youth ChalleNGe Program participants were originally in Tier II. Applicants with this credential moved to Tier I in 1999, as part of a 5-year pilot program, and then moved back to Tier II when the program ended in 2004.[3]

The three-tiered system is the basis for the Navy's Recruit Quality Matrix, used to screen applicants for enlistment. The Navy's Recruit Quality Matrix is depicted below in Figure 1.

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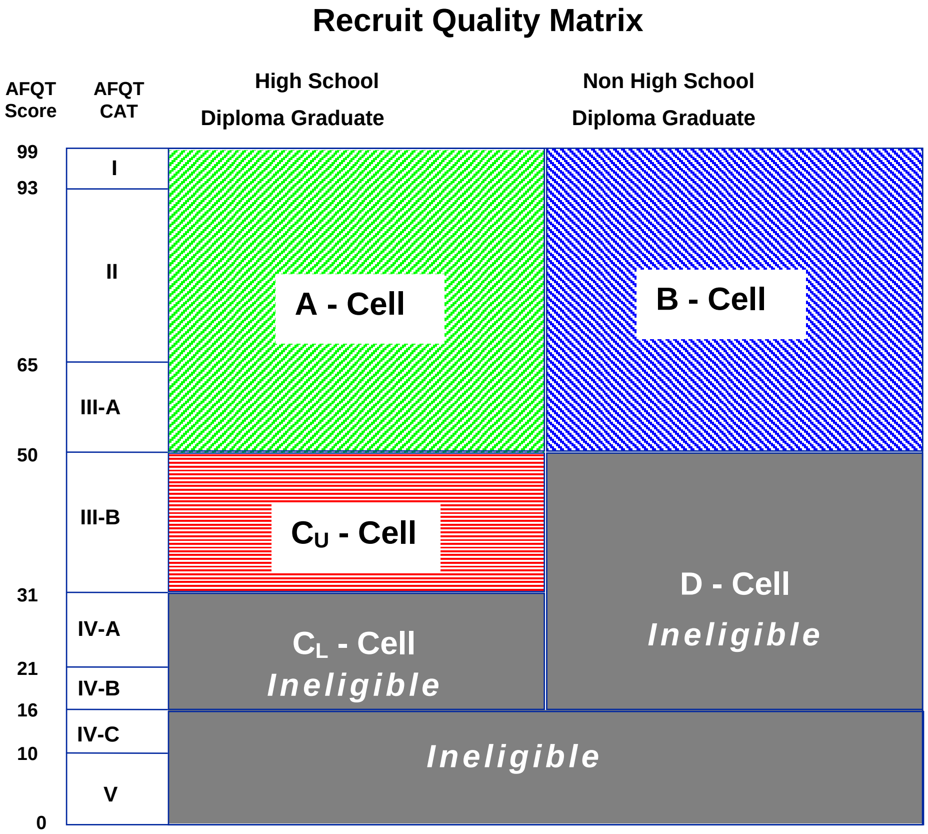
[3] Jennie W. Wenger and April K. Hodari, Final Analysis of Evaluation of Homeschool and ChalleNGe Program Recruits, (Alexandria, VA: CNA Corporation, 2004).



Source: David L. Alderton, Selection and Classification for Enlisted Service, (Millington, TN: Navy Personnel Research, Studies, and Technology, 2002), 3.

Figure 1. Navy's Recruit Quality Matrix

As seen in Figure 1, an applicant's education credentials is cross-referenced with his or her Armed Forces Qualification Test (AFQT) score to determine placement (or cell) in the matrix. Only A-Cell, B-Cell, and Cu-Cell applicants are eligible for enlistment. As shown in Figure 1, A-Cell applicants hold a Tier I education credential and score at least a 50 on the AFQT. Cu-Cell applicants also hold a Tier I credential, but score between 31 and 49 on the AFQT. B-Cell applicants, with an education credential in Tier II or Tier III, must score at least a 50 (the population mean) on the AFQT to be eligible for enlistment.

Tier I recruits who are still in school, either a traditional high school or an alternative program, historically have had the highest DEP attrition rates. Recruits with a traditional high school diploma, both A and Cu-Cells, have historically had the lowest DEP and RTC attrition rates, while Tier II and Tier III, B-cell, recruits have DEP and RTC attrition rates that are typically higher than those of a high school diploma graduate (HSDG). Tier I recruits without a traditional high school diploma have historical DEP and RTC attrition rates on par with Tier II and Tier III recruits. Previous studies have shown these trends also apply to attrition rates after 12, 24, 36, and 48 months of active-duty service for each annual cohort of new recruits.[4] Because of higher attrition rates associated with B-Cell members, the Department of Defense has capped the number of these recruits at 10 percent, while the Navy has limited itself to less than 10 percent B-Cell recruits. In fiscal year 2005, only 5.5 percent of all Navy Active Component recruits were from the B-Cell.[5] In addition to scoring at least a 50 on the AFQT, B-Cell applicants are subject to the High Performance Predictor Profile (HP3) screening requirements, where factors such as motivation to join the Navy, civil/criminal history, age, number of years of education, employment history, type of education credential, and personal references are taken into account to select the "best-qualified" Tier II and Tier III applicants for service in the Navy.[6]

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[4] This topic is discussed in Chapter II, which reviews previous studies.

[5] Office of the Undersecretary of Defense, Personnel and Readiness, Population Representation in the Military Services: Fiscal Year 2005, (Washington, DC: 2007).

Tiers I and II, in the current three-tiered system, both include a wide variety of education credentials. It is unlikely that all members within Tier I or Tier II have similar background characteristics that might influence attrition behavior. If there are significant differences between the education credential holders within a Tier, then the three-tiered system and Recruit Quality Matrix may lack the level of detail needed to most effectively predict attrition. Expressed differently, the levels of aggregation in the current system are too broad, especially when considering the interaction of education with an applicant's other qualifications, demographic characteristics, or background. A screening tool that separates out each education credential by age, for example, could result in a more accurate tool that would lower attrition rates and the costs associated with attrition.

2. Enlistment Programs and Ratings

The Navy has several enlistment programs with varying terms of initial active-duty obligation and follow-on reserve commitments. Most enlistment programs offer a guaranteed rating, while recruits in other enlistment programs are detailed to general aviation, seaman, fireman, or submarine jobs. Studies have shown that new recruits and first-term sailors with a designated rating tend to have higher retention rates than do undesignated sailors. Newer enlistment programs, such as National Call to Service and Non-Prior Service Basic, have only been available for a few years, and few studies have been conducted to determine retention rates for sailors in these programs.

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[6] Commander, Navy Recruiting Command (CNRC), Navy Recruiting Manual-Enlisted COMNAVCRUITCOMINST 1130.8G Volume I (Millington, TN: CNRC, 2005).

Well over 100 enlisted ratings (or occupational categories) have been used by the Navy. Each rating has a different set of job characteristics, ranging from telephone operator to nuclear plant operator to special warfare operator and everything in between. Some ratings, such as Machinist’s Mate (MM) and Electrician’s Mate (EM), perform duties directly applicable to those in similar civilian jobs. Other ratings, such as Aircrew Survival Equipmentman (PR) and Torpedoman's Mate (TM), have fewer civilian counterparts. Previous research shows that different ratings have different retention rates based on a variety of factors such as: job characteristics, promotion opportunities, sea-or-shore-based assignment, and civilian opportunities or “transferability”.[7]

If a specific enlistment program or rating has a significantly greater attrition rate than other program or rating, then the current system for screening, classifying, and assigning recruits may not be the most cost effective way to man the fleet. By identifying which programs have the lowest attrition rates, the Navy may be able to develop new programs to capitalize on its successes while modifying its approach to manning in less successful programs.

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[7] Patricia Griffin, A First-Term Attrition Severity Index for U. S. Navy Ratings, Master’s Thesis, (Monterey, CA: Naval Postgraduate School, 1981).

3. Women in Nontraditional Ratings

Women were first authorized to fill shipboard billets in fiscal year 1979. They were not allowed on combat ships and, therefore, were assigned primarily to repair and tender ships. The repeal of the Combat Exclusion Law in 1994 opened most classes of ships to women. This expanded opportunities for women in the Navy and helped ensure a more equitable rotation between sea and shore duty for all sailors. These changes also provided career paths for women that were more consistent with those of their male counterparts. Prior to repealing the Combat Exclusion Law, women were assigned primarily to administrative and healthcare jobs. This is still true; however, many more nontraditional aviation, construction, mechanical, and electrical ratings have been opened to women, since women are now allowed to serve on combat ships.

Women have historically had higher first-term attrition rates than have men, while the goals for recruiting women have risen over the years. As of FY 2005, women comprised approximately 17 percent of Navy recruits. Studies suggest that women who are interested in joining the Navy do not prefer nontraditional jobs; yet, with a relatively large percentage of new recruits being women, many are classified into nontraditional ratings.

If specific nontraditional ratings have significantly greater attrition rates for women than do traditional ratings, then the current practice of classifying them into these jobs may not be the most cost-effective practice. By identifying which traditional and nontraditional ratings have the lowest attrition rates—and then detailing the background or demographic characteristics of women who are most likely to succeed in these rating—the Navy may be able to develop a screening assignment system to manage attrition by women more effectively.

B. PURPOSE AND BENEFITS OF THE STUDY

The principal purpose of this study is to evaluate the effectiveness of the current Recruit Quality Matrix and three-tier education system by analyzing DEP and RTC attrition trends and probabilities based on education credentials. If the attrition trends do not support the validity of the current matrix, a more detailed screening tool might help the Navy reduce attrition rates and the costs associated with attrition. An improved system would also allow recruiters to focus their efforts on the highest quality applicants.

A secondary purpose of this study is to determine if a recruit’s enlistment program affects the probability of DEP and RTC attrition. By identifying the attrition rates associated with these programs, and specifying the characteristics of recruits most likely to fail or succeed, the Navy could better focus its screening, classifying, and assigning efforts to limit unplanned personnel turnover. Obviously, the Navy could also design new enlistment programs with the characteristics of the successful programs, while reducing the effects of others.

C. ORGANIZATION OF THE THESIS

This thesis contains six chapters. Chapter II presents a review of previous studies related to attrition in DEP, RTC, and active duty generally, based on education credentials, occupational ratings, and demographic factors. Chapter III describes the results of an in-depth trend analysis of DEP attrition and multivariate regression models used to explain how personal characteristics of DEP members could affect attrition. Chapter IV has a similar focus, structure, and methodology, but looks at attrition during the first phase of active duty at the Navy’s RTC. Chapter V presents a potential screening tool that draws from results of the RTC analysis and seeks to reduce first-term attrition. Chapter VI provides a summary of this study, offers conclusions, and provides recommendations for further research.

II. LITERATURE REVIEW

Studies of first-term attrition from the military have been conducted for at least the past 50 years. Education, aptitude test scores, age at enlistment, gender, military occupation, race, and ethnicity have all been identified as predictors of attrition during the first few years of military service. Further research has been conducted to identify attrition predictors for recruits who postpone the start of active duty through the Delayed Entry Program (DEP). Many of the same predictors of first-term attrition, as well as several other predictors, also apply to persons in the DEP.

A. HISTORICAL REVIEW OF ATTRITION RESEARCH BY APTITUDE AND EDUCATION LEVEL

The Air Force was the first branch of service to introduce a differential minimum aptitude standard according to educational attainment. In 1950, for five months, they required high school dropouts to have a higher minimum AFQT score than high school graduates.[8] The Air Force once again introduced an education differential in 1961 based on research that showed lower attrition among high school graduates.[9] The Army adopted a similar policy in 1962, followed by the Navy and Marine Corps in 1965.[10] Different standards were also established for recruits with General

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[8] Sheila N. Kirby and Harry J. Thie, Enlisted Personnel Management: A Historical Perspective (Santa Monica, CA: RAND, 1996), 64.

[9] M. J. Eitelberg, J. H. Laurence, L. S. Perlman, and B. K Waters, Screening for Service: Aptitude and Education Criteria for Military Entry (Alexandria, VA: Human Resources Research Organization, 1984), 18.

[10] Ibid.

Educational Development (GED) certificates of high school equivalency in all services but the Marine Corps.[11] Various adjustments to the education differential have occurred over the years and the Armed Services Vocational Aptitude Battery (ASVAB) has been the only military entrance exam since 1976.[12]

Years of formal education and type of education credential have consistently emerged in studies as significant predictors of first-term attrition. Thus, the Armed Services highly value new recruits with a high school diploma since "possession of a high school diploma is the best single measure of a person's potential for adapting to life in the military."[13]

Research also shows that aptitude is a significant predictor of first-term attrition. According to Trent and Laurence:

> The military now uses the ASVAB to gauge ability to absorb training quickly and perform adequately on the job. The education credential is used to easily screen out many who are not likely to adjust to military life and complete an enlistment term.[14]

AFQT score and education credential together are the foundation of the Navy's current Recruit Quality Matrix.

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[11] Eitelberg et al., 18.

[12] Ibid., 145.

[13] Department of Defense, America's Volunteers, (Washington, D.C.: Office of the Assistant Secretary of Defense [Manpower, Reserve Affairs, and Logistics], 1978), 30.

[14] Thomas Trent and Janice H. Laurence, Adaptability Screening for the Armed Forces, (Washington, D.C.: Office of the Assistant Secretary of Defense [Force Management and Personnel], 1993), 14.

The relationship between education level and attrition probability was first identified by Flyer in 1959. He demonstrated that "unsuitability discharge is in large part associated with low educational attainment" and "the most dramatic way to reduce unsuitability discharge would be to require a high-school diploma from all Air Force recruits."[15] Nearly twenty years later, soon after the end of the modern draft, Cooper confirmed and expanded on Flyer's findings in a RAND study. As shown in Table 1, Cooper used descriptive statistics to show that for Fiscal Year 1971 enlistees, attrition rates for high school graduates (HSGs) increased as AFQT scores dropped and that non-high school graduates (NHSGs) had much higher attrition rates in all AFQT categories.[16] Attrition rates for Category I-III NHSGs were more than twice as high as those for Category IV HSGs.[17]

Table 1. Percent of Enlisted Accessions Discharged for Failure to Meet Minimum Behavior or Performance Criteria: Fiscal 1971 Enlistees Separated as of 30 June 1973 (percent)

	Mental Category			
Education	I-II	III	IV	All
HSG	6.6	9.4	13.7	8.6
NHSG	20.7	24.5	26.8	24.6
All	8.8	15.7	21.1	14.3

Source: Richard V. L. Cooper, Military Manpower and the All-Volunteer Force, R-1450-ARPA (Santa Monica, CA: RAND Corporation, 1977), 140.

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[15] Eli S. Flyer, Factors Relating to Discharge for Unsuitability Among 1956 Airman Accessions to the Air Force, WADC-TN-59-201 (Lackland AFB, TX: Personnel Laboratory, Wright Air Development Center, 1959), 15.

[16] Richard V. L. Cooper, Military Manpower and the All-Volunteer Force, R-1450-ARPA (Santa Monica, CA: RAND Corporation, 1977), 140.

[17] Ibid.

Twenty years after Cooper’s study, in turn, research by Laurence, Ramsberger, and Arabian arrived at many of the same conclusions about the military success of enlistees with different education credentials and aptitude. The authors used descriptive statistics to show 24-month attrition rates by Service and education credential for fiscal years 1988 through 1993 and conducted logistic regressions to calculate the relative odds of 36-month attrition for each service.[18] This study showed that enlistees with alternative education credentials had a 35 to 40 percent attrition rate at the end of two years, compared with 22.5 percent for traditional high school diploma graduates and 20.4 percent for college degree holders.[19] The study concluded that the Department of Defense’s three-tier education categorization system is sound except for adult education holders and persons who did not have a traditional high school diploma but completed one semester of college.[20] Over 36 percent of all enlistees from all Services in these two education categories (no diploma/some college and adult education certificate) were discharged within 24 months of enlisting.[21] On the basis of attrition rates, enlistees with these credentials fall more in line with Tier II enlistees than with enlistees in Tier I.

A 2002 study by Flyer states the following on the topic of high school completion and first-term attrition:

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[18] Janice H. Laurence, Peter F. Ramsberger, and Jane M. Arabian, Education Credential Tier Evaluation, (Arlington, VA: Human Resources Research Organization, 1997).

[19] Ibid., 12.

[20] Ibid.

[21] Ibid., 13.

> A strong relationship continues to be found between dropping out of high school and not completing an initial tour of active service, suggesting that the school and military environments have much in common. Both require a willingness to accept discipline, follow rules, show up on time, and not walk away when dissatisfied. It should come as no surprise that truancy from school is one of the best predictors of absence without leave (AWOL) from the military.[22]

In this study, Flyer calculated descriptive statistics for all new enlistees from FY 1980 through FY 1995. Flyer results confirmed those of Laurence, Ramsberger, and Arabian's showing recruits with an adult education diploma or only one semester of college with no high school diploma had higher first-term attrition rates than did regular high school graduates. Recruits in these categories, with fewer years of formal education and lower AFQT scores, showed higher attrition rates for all Services compared with their counterparts who had graduated from high school.[23] Flyer recommends that the Military Services develop an enlistment screening system "that takes into account the attrition rates identified for a large number of preservice factors."[24] He further recommends that applicants "from groups known to have high attrition rates should be subject to more intensive enlistment screening."[25]

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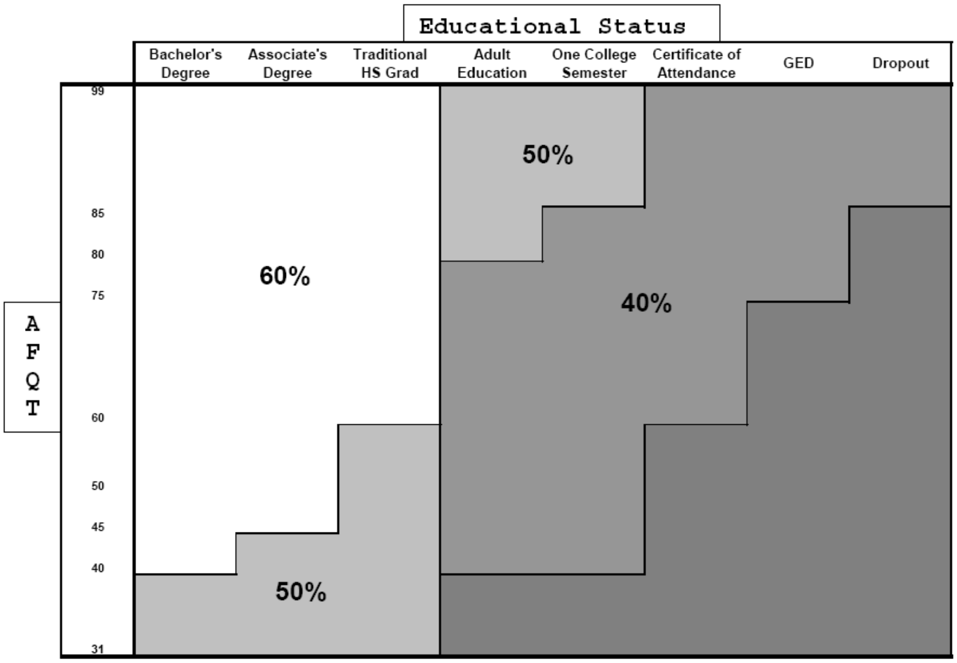
[22] Eli S. Flyer, Educational Credentials and First-Term Attrition, (Unpublished: Directorate for Accession Policy Office of the Assistant Secretary of Defense [Force Management], 2002), 1.

[23] Ibid., 51-59.

[24] Ibid., 84.

[25] Ibid.

In 2004, Bownds corroborated many findings on the correlates of attrition from the previous studies. He found that enlistees with adult education credentials and persons without a traditional high school diploma who completed one semester of college “tend to have very similar attrition rates, and they are more comparable to Tier II and Tier III attrition rates than to those of traditional high school graduates and those with a college degree.”[26] Bownds calculated probabilities for first-term completion and constructed a more refined Recruit Quality Matrix (see Figure 2).



Source: Bownds, Updating the Navy’s Recruit Quality Matrix, 53.

Figure 2. Predicted Probability of First-Term Completion by AFQT Score and Educational Status

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[26] Christopher D. Bownds, Updating the Navy’s Recruit Quality Matrix: An Analysis of Educational Credentials and the Success of First-Term Sailors, Master’s Thesis, (Monterey, CA: Naval Postgraduate School, 2004), 41.

His matrix was set up with education credential across the top, from most successful to least successful, and predicted completion rates “could be discerned by cross-referencing AFQT scores and educational credentials, much like in the current matrix.”[27]

Two other Naval Postgraduate School Master’s theses that studied DEP attrition found a correlation between education credential, AFQT score, and the likelihood of attrition. In 1999, using logistic regression techniques, Henderson discovered that between FY 1990 and FY 1996 DEP recruits with lower AFQT scores had a higher tendency to attrite from DEP did than those with higher scores.[28] Also in 1999, using FY 1991 through FY1996 data, Ogren found that DEP recruits with less than a regular high school diploma were discharged from DEP at higher rates than recruits with at least a high school diploma.[29]

B. WHY STUDENTS FAIL TO GRADUATE HIGH SCHOOL

A large body of research attempted to determine what social and family background factors affect the risk of dropping out of high school. These factors are discussed in *Identifying Potential Dropouts: Key Lessons for Building an Early Warning Data System* by Craig Jerald. Social factors that increase the likelihood of dropping out of high school include: “Students who are poor, who are members of minority groups, who are male, who transferred among multiple elementary and middle schools, and who are overage for their grade."[30] Jerald also summarized family characteristics that tend to raise the risk of dropping out of high school, including: "Students who come from single parent families, have a mother who dropped out of high school, have parents who provide low support for learning, or have parents who do not know their friends' parents well."[31] Further: "Teenagers who take on adult responsibilities—becoming a parent, getting married, and holding down a job—are also more likely to leave school without a diploma."[32] Other studies have shown that students who have many siblings or siblings who have dropped out of school are also at greater risk of dropping out.[33]

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[27] Bownds, Updating the Navy’s Recruit Quality Matrix, 52.

[28] Beulah I. Henderson, An Analysis of Delayed Entry Program (DEP) Attrition by High School Seniors, Master’s Thesis (Monterey, CA: Naval Postgraduate School, 1999).

[29] Margery A. Ogren, Delayed Entry Program Attrition: A Multivariate Analysis, Master’s Thesis (Monterey, CA: Naval Postgraduate School, 1999).

Much of the early research on why students drop out of high school focused exclusively on social and family factors. This research led many educators to believe that the educational system was not primarily responsible for students dropping out. The students' parents and their socioeconomic background were to blame. More recent studies have supported the finding that socioeconomic and family factors are a strong predictor of dropping out, but they are not the only factors.

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[30] Craig Jerald, Identifying Potential Dropouts: Key Lessons for Building an Early Warning Data System, (Washington, D.C.: Achieve, Inc., 2006), 4.

[31] Ibid.

[32] Ibid.

[33] Cathy Hammond, Dan Linton, Jay Smink, and Sam Drew, Dropout Risk Factors and Exemplary Programs, (Clemson, SC: National Dropout Prevention Center, Communities in Schools, Inc., 2007), 4.

Jerald notes that more recent studies have identified two important categories of risk factors: 1) academic performance, and 2) educational engagement. Academic performance factors that raise the risk of dropping out include: struggling students who fall behind in class, low test scores, failing grades in English and math, and being held back a grade one or more times.[34] Educational engagement factors that increase the risk of dropping out include: disengagement from school, disciplinary problems, higher rates of absenteeism, fewer extracurricular activities, and poor relationships with teachers and peers.[35]

A 2002 survey of teachers and students conducted by MetLife found that 20 percent of high school students had considered dropping out of school.[36] Of those who had considered dropping out, 76 percent stated one of their reasons for dropping out was that school was boring. Forty-two percent of those considering dropping out stated that they were not learning enough. Gender and race were not significant, but low grades influenced students’ thinking: fifty-seven percent of those who had earned Ds and Fs had thought about dropping out. Nearly 82 percent of those who had considered dropping out had not discussed leaving school with their teachers; 14 percent had talked to teachers about their poor behavior in class. In contrast, educators believed that only 12.7 percent of students had considered dropping out. Teachers believed their poor-performing students were doing worse in class because they were working too many hours or spending too much time socializing with their friends.[37]

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[34] Jerald, Identifying Potential Dropouts, 5.

[35] Ibid.

[36] MetLife, Survey of the American Teacher 2002, Student life: School, Home, and Community, (New York, NY: MetLife, 2002), 4.

Personal characteristics and “boring” classes are not the only reasons why students drop out. The type of school (public, alternative, or private), school size, class size, student body characteristics and performance, and academic practices and policies have all been found to affect dropout rates.[38] Catholic and other private schools have historically had lower dropout rates, but researchers are not certain about whether the differences are due to student body characteristics, family support, or some other organization structure in these schools.[39] Large schools, particularly those schools in urban and low-income environments, produce the largest share of high school dropouts. Researchers argue that systemic traditional structures at these schools are key in their poor ability to develop high school graduates.[40]

Schools with high student-to-teacher ratios, and where students perceived their teachers to be of lower quality, have higher dropout rates.[41] Teachers at schools with large class sizes have limited opportunity to focus on each of their students. These schools tend to be in urban areas and have more at-risk students enrolled that need extra attention. The teachers cannot give each student the required time, tutoring, or even extra “pep talks” to encourage them to stick with their education. The entire student body suffers in these environments, not just low achievers.

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[37] MetLife, Survey of the American Teacher, 4.

[38] Hammond, Linton, Smink, and Drew, Dropout Risk Factors, 14–15.

[39] Ibid., 15.

[40] Ibid.

[41] Ibid.

Another issue at large urban schools is often decreased safety. These schools tend to have more discipline problems, gang activity, and drug use. The discipline problems can lead to very strict discipline policies that students perceive as unfair, leading to an even more negative school environment where students disengage and drop out.[42] Zero-tolerance discipline policies that require automatic arrest and suspension or expulsion (e.g., for illegal drug and weapons possessions) also have the potential to adversely affect dropout rates.[43] Increased pressures from school districts and communities to suspend, expel, or transfer students who are troublesome may also increase with the push for accountability and the use of high-stakes testing practices.[44]

Many academic policies, such as high-stakes testing and greater accountability, have been implemented since the passage of the No Child Left Behind Act in 2001. Researchers have shown that, while achievement has increased, retention of the most vulnerable students—those who are overage, minorities, low achievers and non-native English speakers—has decreased.[45] Higher standards have been implemented in many schools without providing the extra support that those standards require, such as extra tutoring or summer programs. Many of the schools with the greatest need for improvement have the fewest available resources to implement the higher standards.[46]

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[42] Hammond, Linton, Smink, and Drew, Dropout Risk Factors, 15–17.

[43] Ibid., 16.

[44] Ibid.

[45] Ibid., 15.

Students who perceive life in their neighborhood as happy and safe tend to have a much lower probability of dropping out of high school.[47] Perceptions of happiness and safety are consistently lower in urban environments than in suburban or rural schools, and dropout rates in urban school are consistently higher.[48] In a study by Johns Hopkins University comparing the number of freshmen at a high school to the number of seniors four years later, 61 percent of urban schools, 20 percent of suburban, and only 5 percent of rural schools had the lowest levels of “promoting power”, where entering freshman had less than a 50-percent chance of graduating four years later.[49]

Geographic location also matters for dropping out. For example, students are more likely to dropout in Northern and Western cities and throughout the Southern states.[50] But, not all cities are alike. Fifteen of the United States’ largest 100 cities do not have schools with weak promoting power. These cities are primarily located in the West, and students of racial minorities are not a majority of the student population.[51] At the lower end of the promoting power scale, 10 cities with primarily minority students have 10 or more high schools with very weak promoting power. These include six of the ten largest cities and, collectively, these ten cities contain 29 percent of the nation’s high schools with the lowest levels of promoting power.[52]. A poverty-stricken environment with mostly minority students appears to result in high schools with weak promoting power; yet, schools with more resources and similar ratios of minority students successfully graduate students at the same rate as do majority white schools.[53] Urban, high-poverty areas also are more likely to have high levels of violence, drug-related crime, and overcrowding, which could also affect school engagement, performance, and dropping out.[54]

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[46] Hammond, Linton, Smink, and Drew, Dropout Risk Factors, 16.

[47] MetLife, Survey of the American Teacher 2002, 6.

[48] Ibid., 94-97.

[49] Robert Balfanz and Nettie Legters, Locating the Dropout Crisis: Which High Schools Produce the Nation’s Dropouts? Where Are They Located? Who Attends Them?, (Baltimore, MD: Center for Social Organization of Schools, Johns Hopkins University, 2004), 9.

[50] Ibid.

High school dropouts are more likely to be unemployed than are high school graduates. In 2003, high school dropouts had a 31 percent unemployment rate compared with an overall rate of six percent.[55] In addition, dropouts are more likely than graduates to earn less money when they eventually do find work.[56] High school dropouts are also more likely to receive public assistance than are high school graduates who do not go on to attend college.[57] Further, young women who drop out of high school are more likely than graduates to have children at younger ages, and they are more likely than high school graduates to be single parents.[58] The individual stresses and frustrations associated with dropping out have social implications as well: dropouts make up a disproportionate percentage of the nation’s prison and death-row inmates. In 1997, approximately 68 percent of state inmates and 49 percent of federal inmates had not graduated from high school.[59] This compares with a nationwide rate of less than 15 percent for high school dropouts in 1997[60].

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[51] Balfanz and Letgers, Locating the Dropout Crisis, 11.

[52] Ibid.

[53] Ibid.

[54] Hammond, Linton, Smink, and Drew, Dropout Risk Factors, 17.

55 U.S. Department of Education, National Center for Education Statistics, Indicator 31: Labor Force Participation of Dropouts, http://nces.ed.gov/programs/youthindicators/ Indicators.asp? PubPageNumber=31&ShowTablePage=TablesHTML/31.asp, (Washington, D.C.: 2007).

[56] U.S. Department of Education, National Center for Education Statistics, Indicator 65: Earnings After High School, http://nces.ed.gov/pubs98/yi/y9665a.asp., (Washington, D.C.: 1996).

C. HISTORICAL REVIEW OF ATTRITION RESEARCH BY ENLISTMENT PROGRAM AND ENLISTMENT TERM

A 2005 study of Army attrition trends by Buddin showed little difference in a recruit’s likelihood of attrition based on term of enlistment. At the same time, as the length of a recruit’s enlistment term increased, the likelihood of attrition likewise increased.[61] Figure 3 shows that soldiers with two-year enlistment contracts had first-term attrition rates of 27 percent. Thirty-six month attrition rates for soldiers with enlistment terms between three and six years were relatively constant at around 35 percent. The author related that soldiers with two-year contracts were only “at risk” for 24 months, and attrition rates for soldiers with longer enlistment terms were 28 percent; thus “rate of attrition losses per unit of time is nearly equal between two-year enlistees and recruits obligated for longer periods.”[62]

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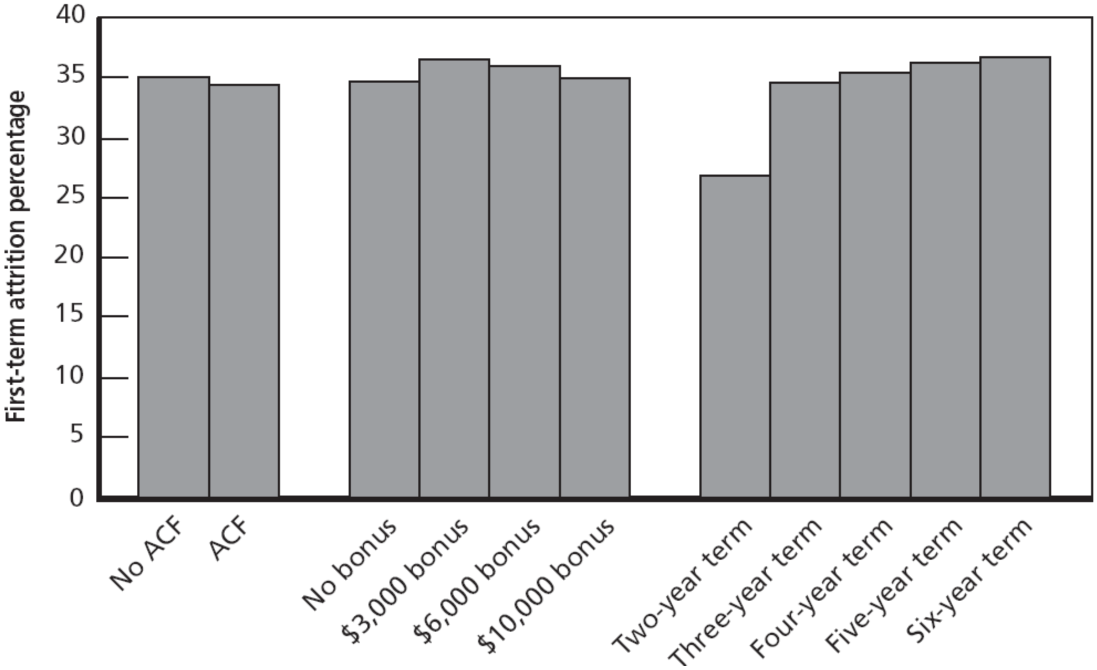
[57] John Wirt, Tom Snyder, Jennifer Sable, Susan P. Choy, Yupin Bae, Janis Stennet, Allison Gruner, and Marianne Perie, The Condition of Education: 1998, NCES 98–013, U.S. Department of Education, National Center for Education Statistics, (Washington, D.C.: U.S. Government Printing Office, 1998), 99.

[58] Marilyn McMillen and Phillip Kaufman, Dropout Rates in the United States: 1994, NCES 96–863. U.S. Department of Education, National Center for Education Statistics. (Washington, DC: U.S. Government Printing Office, 1996), 42.

[59] U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Correctional Populations in the United States, 1997, NCJ–177613. (Washington, DC: U.S. Government Printing Office, 2000), 48.

[60] Phillip Kaufman, Steve Klein, and Mary Frase, Dropout Rates in the United States: 1997, NCES 1999–082, . U.S. Department of Education, National Center for Education Statistics. (Washington, DC: U.S. Government Printing Office, 1999), iii.



Source: Buddin, Success of First-Term Soldiers, 76.

Figure 3. Differences in First-Term (36-month) Attrition by Enlistment Incentive Programs

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[61] Richard J. Buddin, Success of First-Term Soldiers: The Effects of Recruiting Practices and Recruit Characteristics, (Santa Monica, CA: RAND Corporation, 2005), 76.

[62] Ibid., 77.

A 1979 study by Lurie, using the 1973 Navy recruit cohort of four-year enlistees, studied survival rates of new recruits. He analyzed sailors with A-schools guaranteed in their contracts and general detail (GENDET) personnel.[63] The study indicated that sailors with guaranteed A-schools generally exhibited more favorable survival rates than did GENDET sailors and that GENDETs had relatively higher attrition rates approximately two months into their service.[64] Among GENDETs, those with 12 or more years of education in AFQT categories III-B and IV had the highest survival profiles, but those with less than 12 years of education in AFQT categories I through III-A had the lowest survival profile over four years.[65] Among sailors with an A-school guarantee, those with 12 or more years of education in AFQT categories I through III-A had the highest survival profiles, while those with less than 12 years of education in AFQT categories III-B and IV had the lowest survival profiles.[66]

A study by Lau, also from 1979, was conducted on non-prior service, male, enlisted sailors who entered the Navy in November 1976. The goal of the study was to determine if first-term attrition was more closely related to personal characteristics or to organizational characteristics. Lau reported that, over the first year of the study, 38.3

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[63] A-Schools are the Navy’s first level of occupational training. GENDET recruits do not require special occupational training in a school setting.

[64] Philip M. Lurie, Nonparametric Methods for Estimating Recruit Survival with Cross-Sectional Data, (Alexandria, VA: CNA Corporation, 1979).

[65] Ibid.

[66] Ibid.

percent of GENDET sailors failed to complete their first term of enlistment, while only 23.8 percent of A-school sailors attrited.[67] The results of the study suggested GENDET sailors' perceptions of Navy life and working conditions were significantly lower than those of sailors with an occupational rating. GENDET sailors reported poor training effectiveness, little satisfaction with job growth, and general unhappiness regarding experiences with the job itself.[68]

Griffis presented a report at the Annual Navy Workforce Research and Analysis Conference concerning GENDET costs, attrition rates, and career opportunities in May 2007. The Navy reduced the number of GENDETs recruited in FY 2006, but between FY 1990 and FY 2003, GENDETs accounted for between 19 percent and 47 percent of all Navy accessions (Figure 4).[69] GENDETs attrited from Recruit Training Command at higher rates than did sailors with A-school guarantees (Figure 5) and 24-month attrition rates for GENDETS were three-to-five percent higher than for those with an A-school guarantee (Figure 6). GENDETs also had lower average AFQT scores than did A-school sailors (Figure 7). Although attrition rates among GENDETs are generally higher and AFQT scores are lower, Griffis surmised that GENDETs are a cost-effective way of manning the fleet. Recruiting and training costs are approximately $30,000 less per GENDET when compared with the costs of recruiting and training an A-school sailor.[70]

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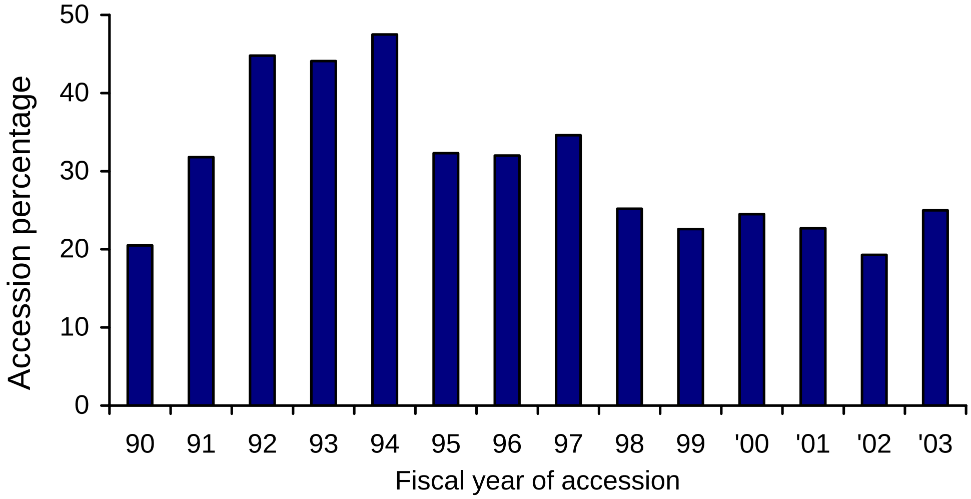
[67] Alan W. Lau, Personal and Organizational Determinants of Enlisted Attrition, (San Diego, CA: Navy Personnel Research and Development Center, 1979), 9.

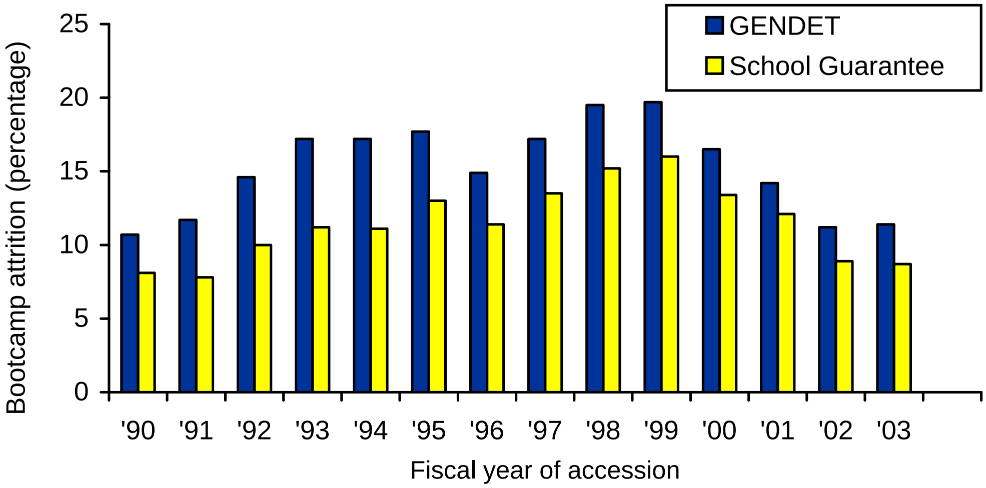
[68] Ibid., 23.

[69] Henry Griffis, GENDET Cost, Attrition, and Career Opportunities, (Monterey, CA: Report presented at the Annual Navy Workforce Research and Analysis Conference, 2007).



Source: Griffis, GENDET Cost, 5.

Figure 4. GENDET Accession Percentage



Source: Griffis, GENDET Cost, 7.

Figure 5. Bootcamp Attrition: GENDETs vs. School Guarantee

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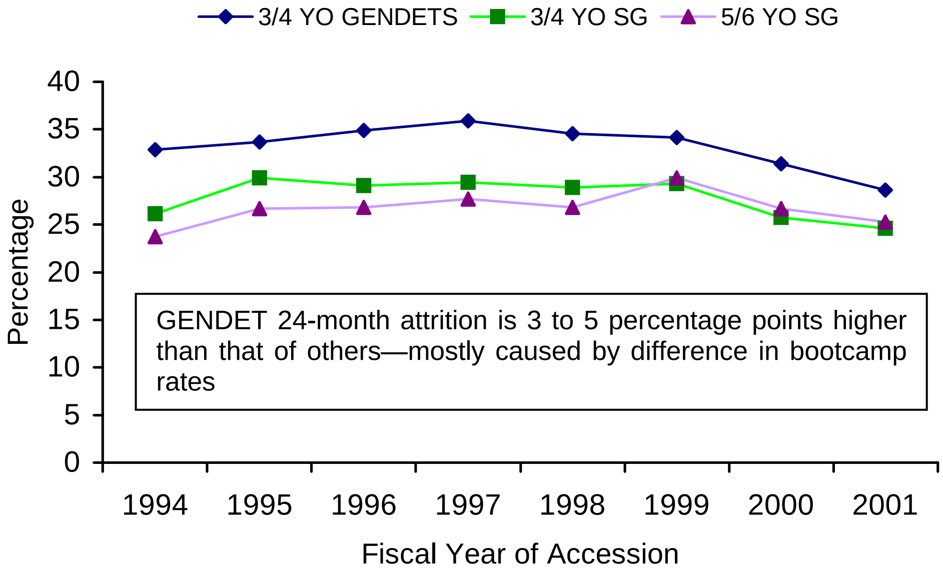
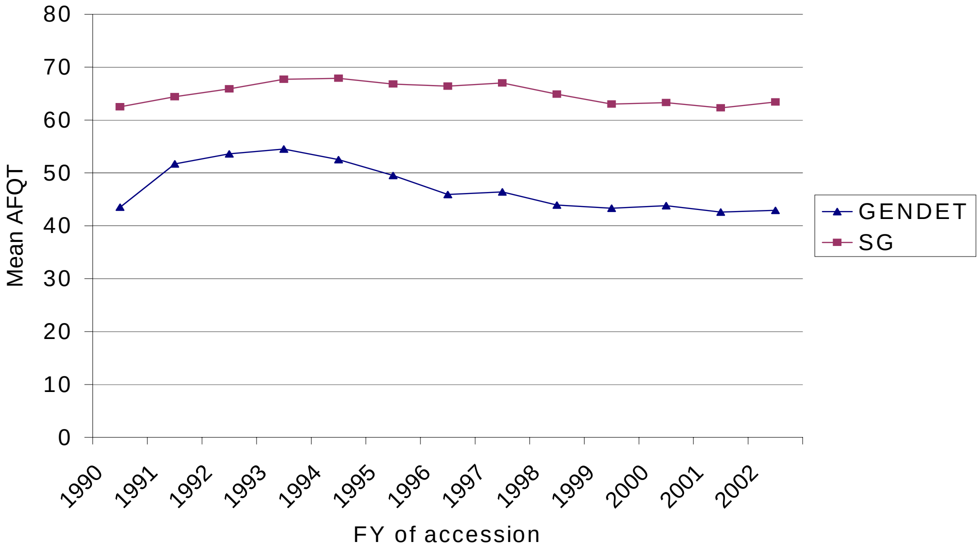
[70] Griffis, 3.



Source: Griffis, GENDET Cost, 8.

Figure 6. 24-Month Attrition: GENDETs vs. School Guarantee



Source: Griffis, GENDET Cost, 8.

Figure 7. Average AFQT of GENDETs vs. School Guarantee

D. HISTORICAL REVIEW OF ATTRITION RESEARCH BY MILITARY OCCUPATION OR RATING

A 1979 study by Gunderson, covering enlisted Navy personnel from 1973 through 1977, showed that organizational influences, particularly occupational assignment, represent an important factor in first-term attrition.[71] Such job assignments involve individuals' abilities, motivations, organizational processes, training, job placement, and general working conditions, leadership, and personal supervision.[72] Gunderson analyzed attrition rates of 12 occupational groupings (Seamanship, Operations, Engineering, Maintenance, Weapons Control, Ordnance, Sensor, Construction, Health Care, Administrative, Logistics, and Cryptology) and three GENDET groupings (Seamen, Airmen, and Firemen). The author showed that occupations varied markedly with respect to personnel attrition rates, and also that education level was correlated with attrition.[73]

Over the term of Gunderson's study, attrition rates for most occupations increased through 1975, followed by slight reductions in 1976 and 1977. Some occupations did not follow this pattern, indicating variability among the occupations. For example, Engineering personnel showed large increases in attrition rates through 1975 and then slight decreases in 1976 and 1977. At the same time, Maintenance personnel showed a general drop in attrition rates from 1973 through 1977. Fiscal year 1977 accessions showed lower first-year attrition rates for many occupations, while the GENDET Airmen group also showed a significant decrease.[74]

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[71] E. K. Eric Gunderson, Unauthorized Absence, Desertion, and Attrition Rates for First-Term Navy Enlisted: A Twelve-Year Perspective, (San Diego, CA: Navy Health Research Center, 1979), 3.

[72] Ibid.

[73] Ibid., 9.

In 1981, Griffin examined the first-term attrition rates of Navy personnel in 85 enlisted ratings. She developed an “attrition severity index” based on five factors identified as having a significant effect on rating-specific attrition: 1) survival, 2) replacement cost, 3) size of rating, 4) shortage or excess of requirements, and 5) priority.[75] The five factors were equally weighted in a multiplicative, multi-attribute model, and the results were generally as expected. Technical jobs, such as Machinist’s Mate and Operations Specialist, had some of the highest indices, indicating that these ratings had the highest probability of first-term attrition. Ratings such as Lithographer and Musician had some of the lowest severity indices, indicating lower probabilities of first-term attrition.

A 2005 study of Army attrition trends by Buddin showed distinct differences in first-term attrition based on occupational group. Figure 8 shows the differences in attrition rates found by Buddin. The results indicate that the attrition rates in combat jobs are somewhat higher than in other occupational groups and that technical and maintenance jobs have lower attrition rates.[76] Buddin theorized that several factors could explain why combat arms jobs have higher attrition rates: “Combat units may be less tolerant of performance and conduct issues," they "face long days in the field and much time away from their families," and "combat skills do not transfer into civilian jobs."[77]

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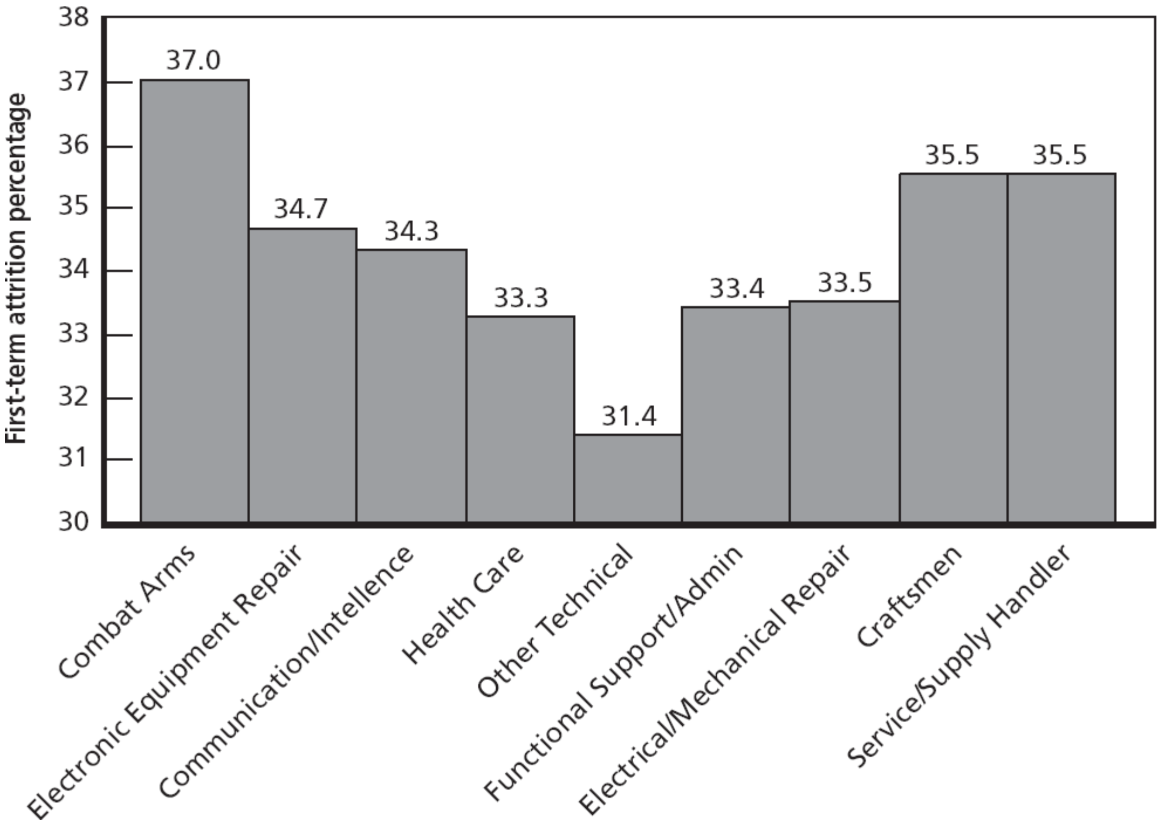
[74] Gunderson, Unauthorized Absence, 9.

[75] Patricia Griffin, A First-Term Attrition Severity Index for U. S. Navy Ratings, Master’s Thesis, (Monterey, CA: Naval Postgraduate School, 1981), 121.

[76] Buddin, Success of First-Term Soldiers, 78.



Source: Buddin, Success of First-Term Soldiers, 78.

Figure 8. Differences in First-Term (36-Month) Attrition by Occupational Group

E. HISTORICAL REVIEW OF ATTRITION RESEARCH BY GENDER

Nearly all studies of enlisted attrition break out gender as a significant factor. Women have historically had higher early attrition rates than men, while the percentage of new recruits who are women has remained relatively stable, standing at approximately 19 percent of new Navy recruits in 2005. Because the number of new female recruits is small in relation to the size of the recruitable population, the Navy has tended to select women of very high quality based on their AFQT score and high school completion.[78]

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[77] Buddin, Success of First-Term Soldiers, 79.

Fletcher and Schug’s research bibliography from 1993 indicates that attrition differences between men and women diminish over time in service and over the long term; in fact, women actually have slightly higher retention rates than do men.[79] A woman’s age at time of enlistment seems to be more important than a man’s age, primarily because age is related to both pregnancy and disability rates for first-term women.[80] Women historically have had much lower rates of demotion, desertion, and unauthorized absence than men.[81] Because of the Combat Exclusion Law, enlisted men and women have had very different occupations; however, through 1993, their long-term behavior and performance has been similar.[82]

A 1993 study by Marshall Brown looked at women's propensity to select nontraditional occupations. He analyzed differences in occupational preferences between male and female civilians and male and female enlisted personnel. The study showed that Navy women are more likely than young civilian women to choose nontraditional occupations. The author found that women of high ability, who desire hightech training and who expect uninterrupted labor force participation, have a higher propensity to choose a nontraditional job than do other women.[83]

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[78] Jean W. Fletcher and Diane T. Schug, The Characteristics and Experiences of USN and USMC Women: A CNA Research Bibliography, (Alexandria, VA: Center for Naval Analysis, 1993), 2.

[79] Ibid.

[80] Ibid.

[81] Ibid.

[82] Ibid.

Several other studies at the Naval Postgraduate School have analyzed DEP, RTC, and first-term attrition. These studies unanimously provide results in sharp contrast to that of Fletcher and Schug. Knox’s 1998 thesis, for example, shows that women were more likely to attrite from DEP and RTC than men between October 1995 and December 1997.[84] Additionally, Ogren’s 1999 thesis shows that, at all education levels across all services, women had higher DEP attrition rates than did men between 1991 and 1996.[85] Henderson’s 1999 thesis indicates that, for every year between 1990 and 1996, women high school seniors had higher DEP attrition rates than did their male counterparts, ranging from 12.2 percentage points higher in 1995 to 16.7 percentage points in 1990 (See Table 2).[86] Bownds’ 2004 thesis follows along with the findings of these previous studies concerning RTC attrition: generally, women are less likely than men to complete bootcamp.[87] Bownds also finds that women were less likely than men to complete their first term of enlistment.

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[83] Marshal B. Brown, An Analysis of the Propensity for Nontraditional Occupations Among Civilian and Navy Women, Master’s Thesis, (Monterey, CA: Naval Postgraduate School, 1993), i.

[84] Bryan W. Knox, Analysis of Navy Delayed Entry Program and Recruit Training Center Attrition, Master’s Thesis, (Monterey, CA: Naval Postgraduate School, 1998).

[85] Ogren, Delayed Entry Program Attrition, 51.

[86] Henderson, An Analysis of Delayed Entry Program Attrition, 49.

[87] Bownds, Updating the Recruit Quality Matrix, 23.

Table 2. Percentage Distribution of High School Senior DEP Attrites by Year of DEP Entry and Gender

	Gender		
Fiscal Year	Men	Women	Difference
1990	27.3	44.0	16.7
1991	25.5	40.3	14.8
1992	23.5	36.1	12.6
1993	25.0	41.3	16.3
1994	25.0	38.1	13.1
1995	27.9	40.1	12.2
1996	30.1	44.3	14.2
Total	26.1	40.6	14.5

Source: Henderson, An Analysis of Delayed Entry Program, 49.

Buddin’s 2005 study of Army first-term attrition between fiscal years 1995 and 2001 corroborates the results of these master’s theses. Buddin’s results show that women had a 51 percent first-term attrition rate compared with 31 percent for men. He also found that “the gap between women and men has increased from 11 percentage points at the end of six months to a full 20 percentage points at the end of the first term.”[88]

F. OVERVIEW: TRENDS

In general, studies of attrition from the DEP, RTC, and throughout the first term have found generally similar results. However, some results are inconsistent. Based on the literature review, the following trends emerge.

All studies tend to agree that educational attainment and AFQT percentile score are important: military service members with at least a high school diploma, and a higher AFQT score, are less likely to be discharged from service than are those with relatively lower educational attainment and lower AFQT scores. The military uses ASVAB scores to gauge the ability of a person to be trained, and education credentials are used to screen out persons who are less likely to complete an enlistment term.[89]

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[88] Buddin, Success of First-Term Soldiers, 74.

Studies analyzing enlisted attrition with respect to Navy enlistment programs also generally agree. Sailors enlisted in the GENDET program tend to have higher first-term attrition rates, lower AFQT scores, and less job satisfaction. One area where studies disagreed is with the perception of promotability of GENDET sailors. For example, Lau found that GENDETs did not believe they had the same chance of being promoted to higher ranks as did those with a rating.[90] Griffis, on the other hand, found that GENDETs had just as many career opportunities as did sailors with a designated rating.[91] The differences in these two studies could be due to the almost 30-year gap between the studies. The Navy changed significantly between 1979 and 2007.

Studies of first-term attrition focusing on a recruit’s enlisted rating, or occupational group, have reached mixed conclusions. Griffin’s study, for example, found that recruits in a technical job had a higher probability of first-term attrition.[92] Buddin’s study, on the other hand, showed that technical jobs had lower attrition rates.[93] The difference between these two studies are significant;

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[89] Trent and Laurence, Adaptability Screening, 14.

[90] Lau, Personal and Organizational Determinants, 9.

[91] Griffis, GENDET Cost, 17.

[92] Griffin, A First-Term Attrition Severity Index, 121.

[93] Buddin, Success of First-Term Soldiers, 79.

Griffin studied Navy attrition in the late 1970s, while Buddin studied Army attrition in the 1990s-2000s. Again, the period in which attrition is studied is an important consideration when evaluating trends, given the possible influence of changing organizational, social, or economic factors.

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III. ANALYSIS OF NAVY DELAYED ENTRY PROGRAM ATTRITION

A. DATA

The data set used for analysis was constructed from Commander, Navy Recruiting Command’s (CNRC’s) Personalized Recruiting for Immediate and Delayed Enlistment (PRIDE) database. It contains Delayed Entry Program (DEP) records from fiscal years 1998 through 2005.[94] Eight years worth of data were collected to ensure that there would be adequate sample sizes for DEP members possessing some of the less common education credentials and enlisted in newer enlistment programs and ratings. A larger sample size (including fiscal year 2006) would increase accuracy of the attrition trends with respect to newer programs and ratings. Fiscal years 1998 through 2005 were chosen because, during this time period, the national economy changed due to the “dot com” bubble and bust, the September 11, 2001 attacks occurred, and the wars in Iraq and Afghanistan occurred.

The source database contained 570,354 observations, with data from fiscal years 1997 through 2007. Due to incomplete data from fiscal years 1997, 2006, and 2007, these years were dropped (n=95,699). Additionally, prior service DEP members were not considered, and observations with missing or unreliable data were deleted. These restrictions resulted in a data set with 459,273 observations for analysis. CNRC also provided files matching all ZIP codes nationwide to FIPS[95] codes, Navy Recruiting Districts (NRDs), recruiting zones, and recruiting stations (NRSs). CNRC re-aligned from 31 NRDs to 26 NRDs in 2006, so the author normalized the data to 26 NRDs using ZIP codes to provide a more relevant analysis. County-wide unemployment rates were used to examine the effects of economic conditions on DEP attrition. Unemployment rates for each year were obtained from the Bureau of Labor Statistics (BLS) Web page by the author. The FIPS codes were first merged with the data based on DEP members' home-of-record ZIP code. Finally, the unemployment rates were merged with the data using the FIPS codes. Stata™ (statistics and data analysis) software was used to process and analyze the data.

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[94] I would like to thank Mike Evans, Chris Pond, and Rich VanMeter at CNRC for providing the PRIDE zip code data, their help deciphering the fields in the data, and providing information about enlistment programs and ratings.

B. METHODOLOGY

The eight years of enlisted cohort data were used to analyze attrition patterns of various groups of education credential holders, enlistment programs, races, genders, and ratings. CNRC provided a field for each record showing the status of the record as “OPEN”, “SHIPPED”, or “ATTRITED”. Not all statuses were reported correctly so CNRC also provided a cancellation code for each record to determine the actual status of each record.

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[95] Federal Information Processing Standards codes (FIPS codes) are a standardized set of codes issued by the National Institute of Standards and Technology (NIST) to ensure uniform identification of geographic entities through all federal government agencies. Unemployment rates are issued on a FIPS code basis from the Bureau of Labor Statistics (BLS).

1. Variables

The variables of interest in the education and tier evaluation section are AFQT score and education credential because these are the variables used by recruiting commands to determine initial enlistment eligibility. There are 17 education credentials present in the data but only 16 have sufficient quantities for meaningful analysis. Tier I education variables are: hs_senior, hs_grad, fail_exit, adulted_15cred, adult_hs, sem_college, assoc_deg, bach_deg, mast_deg, and home_school. Tier II education variables are: GED, other_non_trad, corr_school, cert_attnd, and ngycp. The Tier III education variable is: no_cred. See table 3 for further descriptions of each education variable.

Table 3. Educational Credentials: Variable Name and Description

Variable	Variable Name	Variable Description (with Education Code and Tier Level)
High School Graduate	hs_grad_I	One who has earned a traditional high school diploma (code L, Tier I)
High School Senior	hs_senior_I	One who is enrolled in his/her senior year of high school (code S, Tier I)
Enrolled in Adult Education or 15 College Credits	adulted_15cred_I	One who is enrolled in adult education or 15 college credits (code M, Tier I)
Adult School Graduate	adult_hs_I	One who has earned an adult high school diploma (code B, Tier I)
Completed One Semester of College	sem_college_I	One who has completed 15 credits college or Job Corps program (code 8, Tier I)

Variable	**Variable Name**	**Variable Description (with Education Code and Tier Level)**
Home School Graduate	home_school_I	One who has earned a home school diploma (code H, Tier I[96])
Complete High School, Fail Exit Exam	fail_exit_I	One who has completed academic requirements for graduation, but failed a state mandated secondary school exit exam (code F, Tier I)
Associate’s Degree Holder	assoc_deg_I	One who has earned an Associate’s degree (code D, Tier I)
Bachelor’s Degree Holder	bach_deg_I	One who has earned a Bachelor’s degree (code K, Tier I)
Master’s Degree Holder	mast_deg_I	One who has earned a Master’s degree (code N, Tier I)
GED Recipient	GED_II	One who has earned a test based equivalency diploma, GED (code E, Tier II)
National Guard Youth Challenge Program	ngycp_II	One who has earned a GED and Participated in the NGYCP[97] or SCNGC[98] (code X, Tier II)
High School Certificate of Completion or Attendance	cert_attnd_II	One who possesses a high school certificate of attendance or completion (code J, Tier II)
Correspondence or Distance Learning, Home or Independent Study	corr_school_II	One who possesses non-traditional credentials from correspondence or distance learning, home or independent study (code 7, Tier II)

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[96] Home school diploma holders have been classified as both Tier I and II. For the purposes of this analysis, they are all Tier I.

[97] The National Guard Youth ChalleNGe Program (NGYCP) is a community-based program that leads, trains and mentors at-risk youth and combines quasi-military training with GED certification.

[98] The Seaborne Challenge Corps (SCNGC) is a DoD/DoN sponsored program presently operating only in Galveston, TX and is a cooperative program with the Texas National Guard. Participants must meet the same requirements as the NGYCP.

Variable	**Variable Name**	**Variable Description (with Education Code and Tier Level)**
Non-Traditional Credential Not Listed in Other Categories	other_non_trad_II	One who possesses a non-traditional high school credential not in other categories (code 5, Tier II)
High School Dropout With No Credential	no_cred_III	One who does not posses any from of high school credential (code 1, Tier III)

Source: Commander, Navy Recruiting Command, COMNAVCRUITCOMINST 1130.8G Volume I Change 4, 2007.

The variables of interest in the enlistment program section are each of the various enlistment programs available to applicants. Sixteen enlistment programs are present in the data, but many are obsolete because they are not currently valid enlistment programs. Many of the obsolete programs are included in the analysis for a historical perspective of enlistment program DEP attrition performance. Enlistment program variables included in this analysis are: twoYO, threeYO, GENDET, SG, fiveYO, AEF, ATF, NF, GTEP, NCSA, NPSB, TEP, and other_ep. See Table 4 for further descriptions of each enlistment program variable.

Table 4. Enlistment Programs: Variable Name and Description

Variable	**Variable Name**	**Variable Description (with Status)**
Two year obligor	twoYO[99]	Enlisted in a program with a 2 year obligor, GENDET or Seabees, (obsolete)
Three year obligor	threeYO[100]	Enlisted in a program with a 3 year obligor (obsolete)
GENDET with a four year obligor	GENDET[101]	Enlisted as a GENDET, or “general detail,” with a 4 year obligor (current)
School Guarantee Program	SG	Enlisted in the School Guarantee program with a 4 year obligor - members are guaranteed a Navy A-School following recruit training (current)
School Guarantee with a five year obligor	fiveYO	Enlisted in the School Guarantee program with 5 year obligor due to extended training (current)
Advanced Electronics Field	AEF	Enlisted in the School Guarantee Advanced Electronic Field program with a 6 year obligor due to extended training (current)
Advanced Technical Field	ATF	Enlisted in the School Guarantee Advanced Technical Field program with a 6 year obligor due to extended training (current)

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[99] The data list this enlistment program as “2YO” with members joining the Navy Reserve as GENDETs or Seabees. GENDETS serve two years in the Ready Reserve followed by six years in the Individual Ready Reserve (IRR). Seabees serve two years on active duty followed by four years in the Selected Reserve (SELRES) and two years in the IRR.

[100] The data list this enlistment program as “3YO” with members joining the Navy Reserve as GENDETs with a three year active duty obligor with remaining time in the IRR.

[101] The data list this enlistment program as the “SF” (Seafarer or Subfarer) program with members joining as seamen, airmen, firemen, or submariners (SN/AN/FN/SS). CNRC changed the program name to Professional Apprentice Career Tracts (PACT) in FY2007.

Variable	Variable Name	Variable Description (with Status)
Nuclear Field	NF	Enlisted in the School Guarantee Nuclear Field program with a 6 year obligor due to extended training (current)
GENDET Targeted Enlistment Program	GTEP[102]	Enlisted in the GENDET Targeted Enlistment Program with a 4-5 year obligor depending on rating (obsolete)
National Call to Service A-School Program	NCSA[103]	Enlisted in the National Call to Service program with an A-school guarantee (current)
Non-Prior Service Basic Program	NPSB[104]	Enlisted in the Non-Prior Service Basic program (current)
Full Time Support Enlistment Program	TEP[105]	Enlisted in the Full Time Support (FTS) Enlistment Program, 4-6 year obligor depending on rating (current)
Other Enlistment Programs	other_ep	Enlisted in other, less common, enlistment programs (JOBS, TASP, DIVR, HM/SEAL, obsolete)

Source: Commander, Navy Recruiting Command, COMNAVCRUITCOMINST 1130.8G Change 4, 2007.

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[102] The GTEP program is designed to enhance GENDET manning in the fleet while guaranteeing assignment to A-school after serving approximately nine to 18 months at a permanent duty station.

[103] Members in the NCSA program join the Navy Reserve and serve 15 months on active duty following their initial training (RTC, A-school). The next 24 months are served on active duty or as a drilling Selected Reservist. The remaining obligation can be served as: active duty, SELRES, IRR, AmeriCorps, Peace Corps, or any combination.

[104] The NPSB program was designed to eliminate critical manning shortfalls in the Navy Reserve for Hospital Corpsman and Seabee ratings and is now open to many more ratings. Members complete recruit training, A-school, and then report to a Reserve unit and incur an eight-year service obligation. CNRC changed the program name to New Accessions Training (NAT) in FY2007.

[105] Members in the TEP program join the Navy Reserve, and after recruit training and A-school serve four-to-six years active duty (depending on rating) with a Navy Reserve Unit.

The variables of interest in the enlisted rating section are each of the Navy’s various DEP enlisted ratings normalized to current ratings. Over the years several ratings have merged together and new ratings have been established. For instance, Photographers (PH), Journalists (JO), Lithographers (LI), and Illustrator/Draftsmen (DM) merged to form the Mass Communications Specialist (MC) rating in July 2006.

DEP enlistment ratings do not always match Navy ratings. For example, after recruit training, DEP members with a guarantee for the Avionics Technician (AV) school attend common basic electronics training, after which they are selected for either the Aviation Electrician (AE) rating or the Aviation Electronics Technician (AT) rating. Other DEP enlistment programs/ratings in which members are guaranteed the program, but not a specific rating, are the Advanced Electronics and Computer Field (AECF), Submarine Electronics and Computer Field (SECF) and the Nuclear Field (NF).

Members who join the Navy without a designated school guarantee (general detail or GENDET) enlist as Seamen, Airmen, or Firemen (SN/AN/FN). They attend an apprenticeship school and then join the fleet. The only GENDET option available at the time of this study is the SN program.

Women are not allowed to serve on submarines, so submarine-specific ratings will not be analyzed during the female traditional jobs study. Ratings created after FY2005, such as Special Warfare Operator (SO), Special Warfare Boat

Operator (SB), Navy Diver (ND), and Explosive Ordnance Disposal Technician (EOD), are not included in this study. See Table 5 for a listing of DEP ratings.

Table 5. U. S. Navy Delayed Entry Program Ratings

Rating Abbreviation	Rating Name
ABE	Aviation Boatswain's Mate - Launching & Recovering Equipment
ABF	Aviation Boatswain's Mate - Fuels
ABH	Aviation Boatswain's Mate - Aircraft Handling
AC	Air Traffic Controller
AD	Aviation Machinist's Mate
AECF	Advanced Electronics and Computer Field
AG	Aerographer's Mate
AIRC	Aircrew – Non-rescue Swimmer
AIRR	Aircrew – Rescue Swimmer
AM	Aviation Structural Mechanic
AME	Aviation Structural Mechanic - Safety Equipment
AN	Airman
AO	Aviation Ordnanceman
AS	Aviation Support Equipment Technician
AV	Avionics Technician
AZ	Aviation Maintenance Administrationman
BU	Builder
CE	Construction Electrician
CM	Construction Mechanic
CS	Culinary Specialist
CSS	Culinary Specialist – Submarines (Men only)
CTI	Cryptologic Technician - Interpretive
CTM	Cryptologic Technician - Maintenance
CTR	Cryptologic Technician - Collection
CTT	Cryptologic Technician - Technical
DC	Damage Controlman

Rating Abbreviation	Rating Name
EA	Engineering Aide
EM	Electrician's Mate
EN	Engineman
EO	Equipment Operator
FN	Fireman
GM	Gunner's Mate
GSE	Gas Turbine System Technician - Electrical
GSM	Gas Turbine System Technician - Mechanical
HM	Hospital Corpsman
HT	Hull Maintenance Technician
IC	Interior Communications Electrician
IS	Intelligence Specialist
IT	Information Systems Technician
MA	Master-at-Arms
MC	Mass Communication Specialist
MM	Machinist's Mate
MMS	Machinist's Mate – Submarines (Men only)
MN	Mineman
MR	Machinery Repairman
MT	Missile Technician – Submarines (Men only)
MU	Musician
OS	Operations Specialist
PC	Postal Clerk
PR	Aircrew Survival Equipmentman
PS	Personnel Specialist
QM	Quartermaster
RP	Religious Programs Specialist
SECF	Submarine Electronics and Computer Field (Men only)
SH	Ship's Serviceman
SK	Storekeeper
SKS	Storekeeper – Submarines (Men only)
SN	Seaman

Rating Abbreviation	Rating Name
SS	Submariner (Men only)
STG	Sonar Technician - Surface
SW	Steelworker
UT	Utilitiesman
YN	Yeoman
YNS	Yeoman – Submarines (Men only)

Source: After: COMNAVCRUITCOMINST 1130.8G Volume I and Wikipedia—http://en.wikipedia.org/wiki/List_of_United_States_Navy_ratings.

C. RESULTS

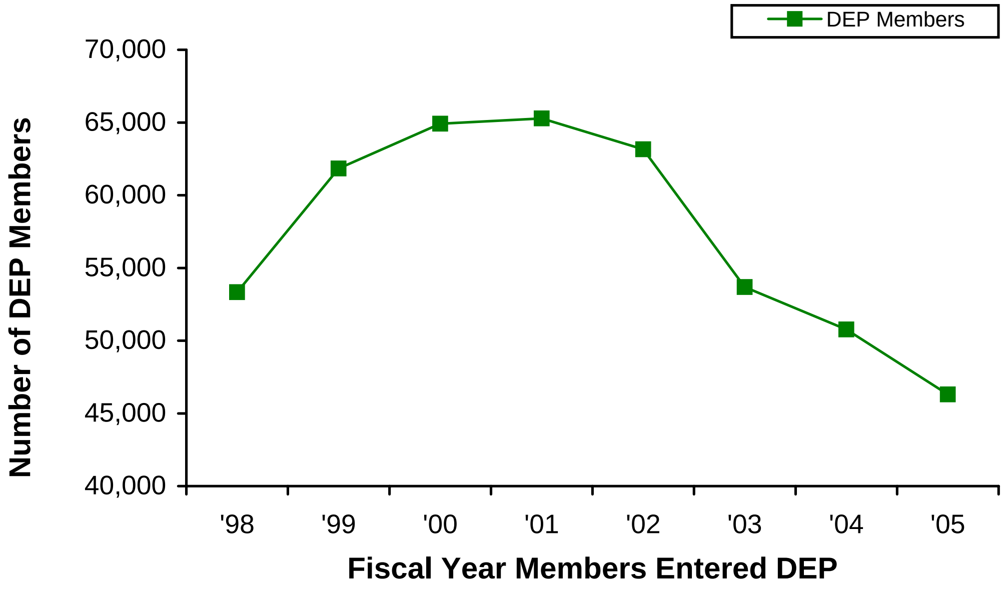
This section presents the results of Delayed Entry Program enlistment trends and attrition analysis by educational credential, AFQT category, enlistment program, gender, race, and rating.

1. DEP Enlistment and Attrition Trends

Over 460,000 men and women entered the Navy’s Delayed Entry Program as non-prior service enlisted members between FY1998 and FY2005. Figure 9 shows the number of DEP recruits increased from just over 53,000 in FY1998 to over 65,000 in FY2001. There was a smaller drop in the number of recruits in FY2002, and then a drastic drop through FY2005, reaching a minimum of just over 46,000 DEP accessions. DEP attrition rates over the period of the study varied widely. Figure 10 shows that attrition rates gradually increased from 18.5 percent to 19.6 percent between FY1998 and FY2001. Over the next three years, DEP attrition rates increased dramatically, reaching a peak in FY2004 at 24.1 percent.

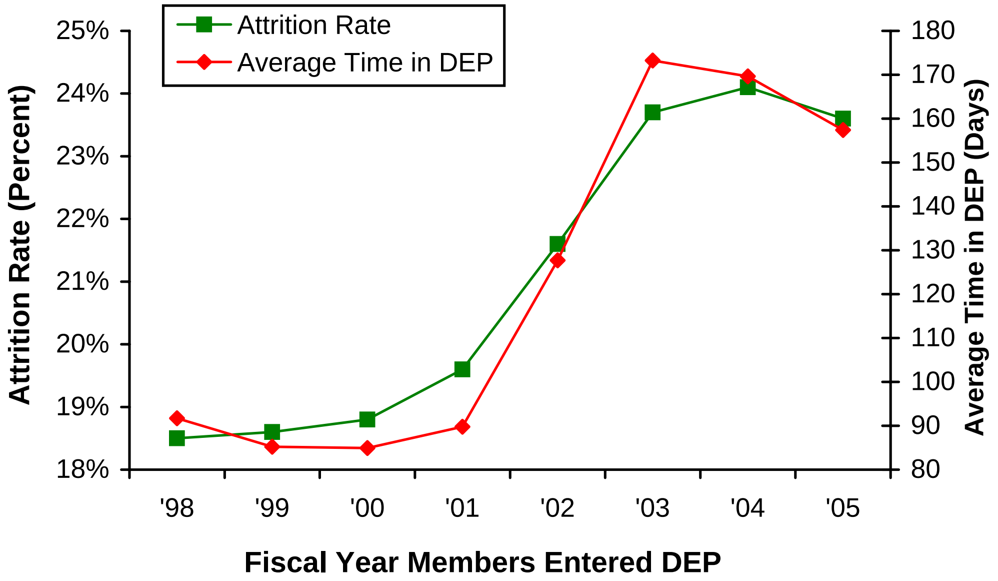
Figure 10 also shows the average number of days DEP members stay in DEP over the period of this study. Between

FY1998 and FY2001, average time in DEP was approximately 90 days. In FY2002, it jumped to 130 days and then to 173 days in FY2003. Average time in DEP then dropped over the next two years. The recruiting climate was very good between FY2002 and FY2005 causing RTC and A-school seats to fill up quickly and creating backlogs of members waiting in DEP. Comparing attrition rates and DEP times in Figure 10, one can see a strong correlation between average time in DEP and the overall attrition rate by year of entry into the DEP.



Source: Derived from PRIDE data files (CNRC, 2007).

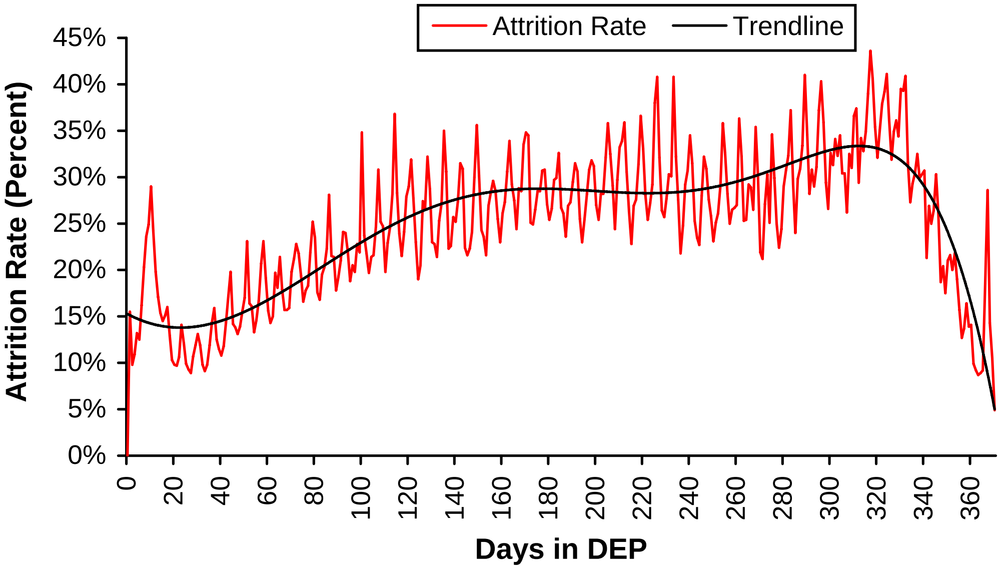
Figure 9. Total Number of DEP Accessions by Year of Entry, Fiscal Years 1998-2005



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 10. Attrition Rate and Average Time (Days) in DEP for DEP Members by Year of Entry, Fiscal Years 1998-2005

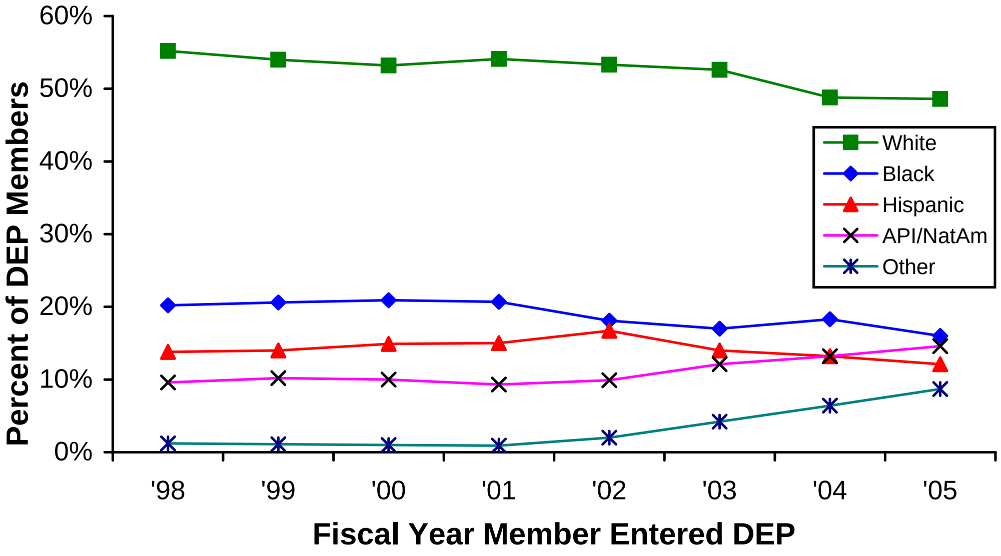
The data in Figure 11 show average attrition rates per days in DEP from FY1997 through FY2005. Attrition rates rise steadily through approximately 150 days in DEP, level off through approximately 250 days, rise again and peak at approximately 320 days, and then drop sharply.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 11. Average DEP Attrition Rate per Day in DEP

Data provided in Figure 12 show sizable differences in DEP accessions among the different racial and ethnic groups during the time frame covered in this study. White members are by far the largest group of accessions, but show a decreasing trend in overall accessions (55.2 percent in FY1998 to 48.6 percent in FY2005). Blacks comprised the second largest racial group and also show a decreasing trend (20.2 percent in FY1998 to 16 percent in FY2005). Hispanics show an increasing trend through FY2003 and then drop through FY2005. The Asian, Pacific Islander, and Native American (API/NatAm) racial groups exhibit a gradually rising trend over the course of the study. The “Other” category shows members who did not provide racial or ethnic information or chose more than one race or ethnicity. This group hovers around 1 percent until FY2001 and thereafter displays a steady rise. It should be noted that DoD changed the race and ethnicity codes in January 2003, providing many more choices for DEP members when they self-select their race and ethnicity.

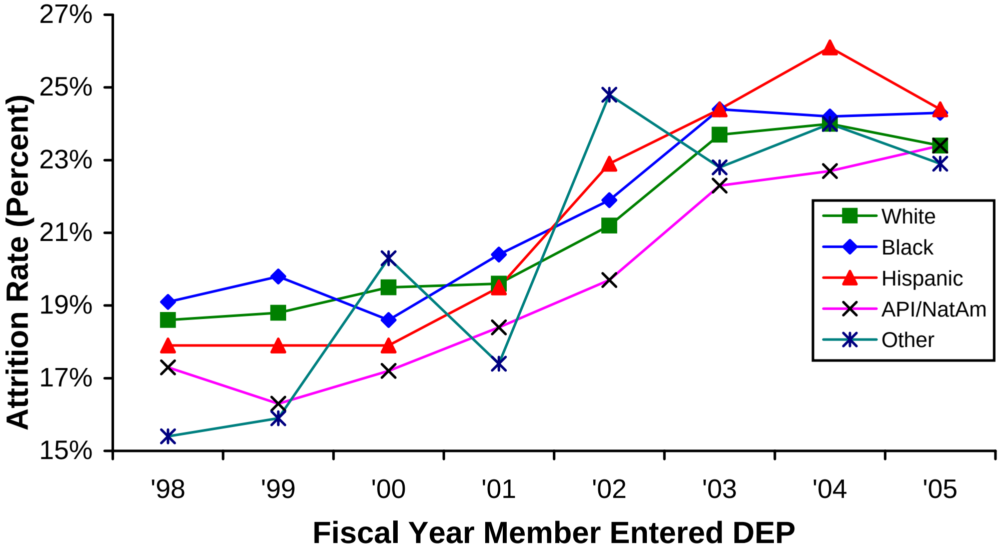


Source: Derived from PRIDE data files (CNRC, 2007).

Figure 12. Percent of DEP Members by Racial/Ethnic Group and Year of Entry, Fiscal Years 1998-2005

Attrition rates for each race or ethnicity group varied over the period examined in this study. Figure 13 shows the attrition rates for White members closely resembles the overall trend from Figure 10. This is expected, since White members comprise the largest percentage of DEP members each year. Attrition rates for some minority groups fluctuated more than others. For example, the attrition rates for Blacks were typically higher than those for Whites, with the only exception in FY2000. Rates for Hispanics were lower than those of Whites through FY2001 and rose above through FY2005. Rates for Asians, Pacific Islanders, and Native Americans were consistently lower than those for Whites. The

"Other" group shows the greatest variability, going from the lowest group in FY1998 to the highest group in FY2002, and then back to the lowest group in FY2005.

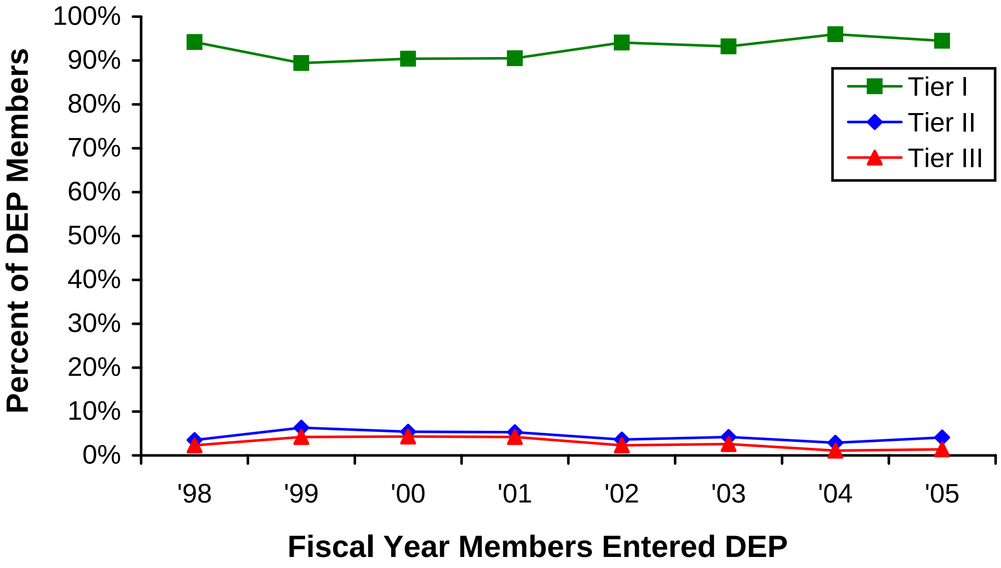


Source: Derived from PRIDE data files (CNRC, 2007).

Figure 13. Attrition Rate of DEP Members by Race/Ethnicity and Year of Entry, Fiscal Years 1998-2005

2. DEP Enlistment and Attrition Trends by Educational Tier, Recruit Quality Matrix Cell, and AFQT Score

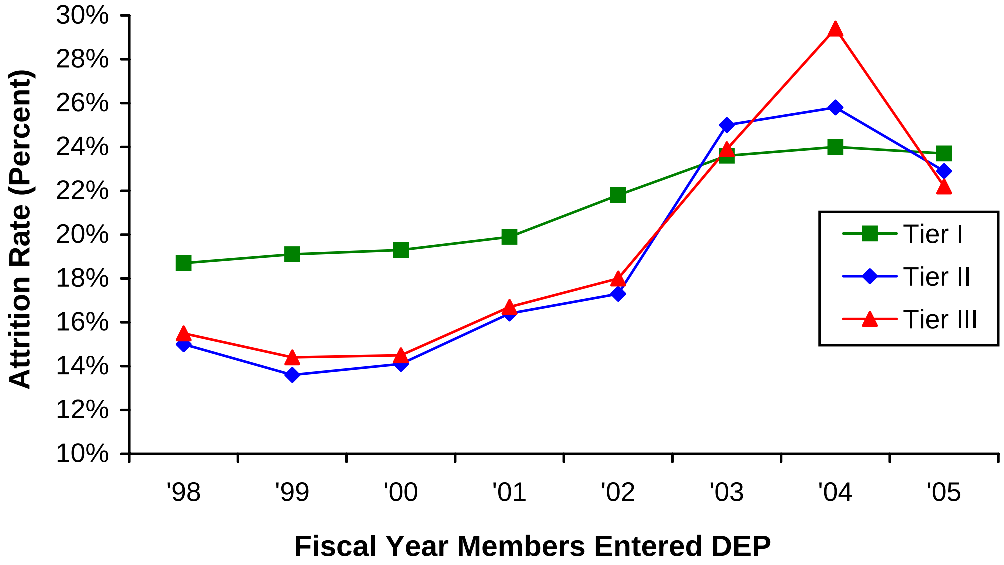
The DoD Educational Tier system and Navy Recruit Quality Matrix were designed based on first-term attrition rates, but the author wished to analyze DEP attrition rates based on the Tier and Matrix structures. Figure 14 shows the percentage of DEP members in each AFQT Tier category has fluctuated very little over the period of this study. Tier I reached a low of 89.4 percent in FY1999 and reached its highest point in FY2004 at 96 percent. Tier II members reached a maximum of 6.3 percent in FY1999 and dropped to their minimum of 2.9 percent in FY2004. Tier III's maximum was in FY2000 at 4.3 percent, and the minimum of 1.1 percent in FY2004.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 14. Percent of DEP Members by Education Tier and Year of Entry, Fiscal Years 1998-2005

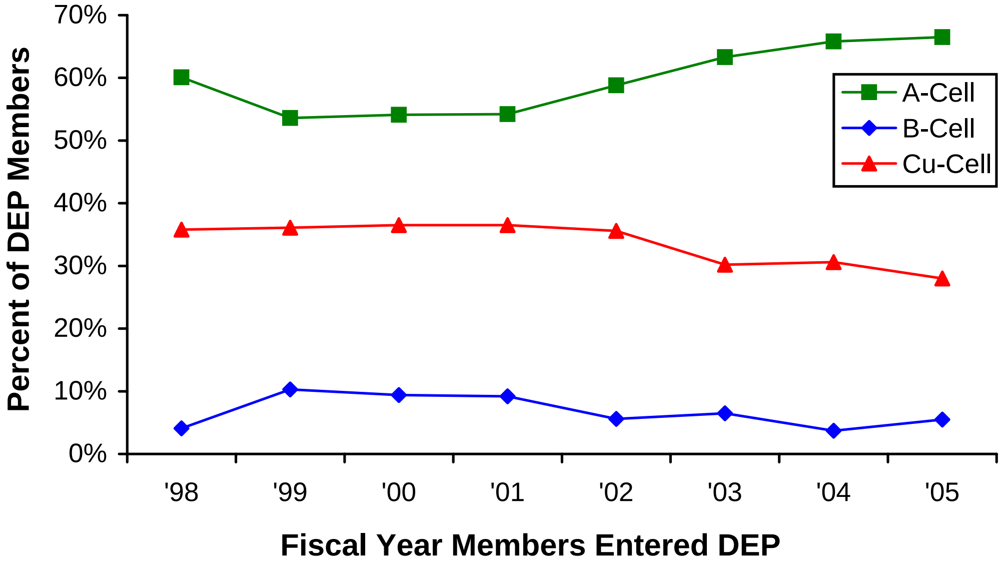
Attrition rates for each Tier group are presented in Figure 15. Each group shows a similar trend, with the lowest attrition rates in earlier fiscal years and higher rates in later years. The trend for Tier I DEP members is similar to total attrition rate in Figure 10, since over 90 percent of all DEP members are Tier I. Prior to FY2003, DEP attrition rates for Tier II and Tier III members were significantly lower than Tier I members. DEP attrition rates for Tiers II and III jumped above Tier I in FY2003 and FY2004, and again dipped below Tier I in FY2005.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 15. Attrition Rate of DEP Members by Education Tier and Year of Entry, Fiscal Years 1998-2005

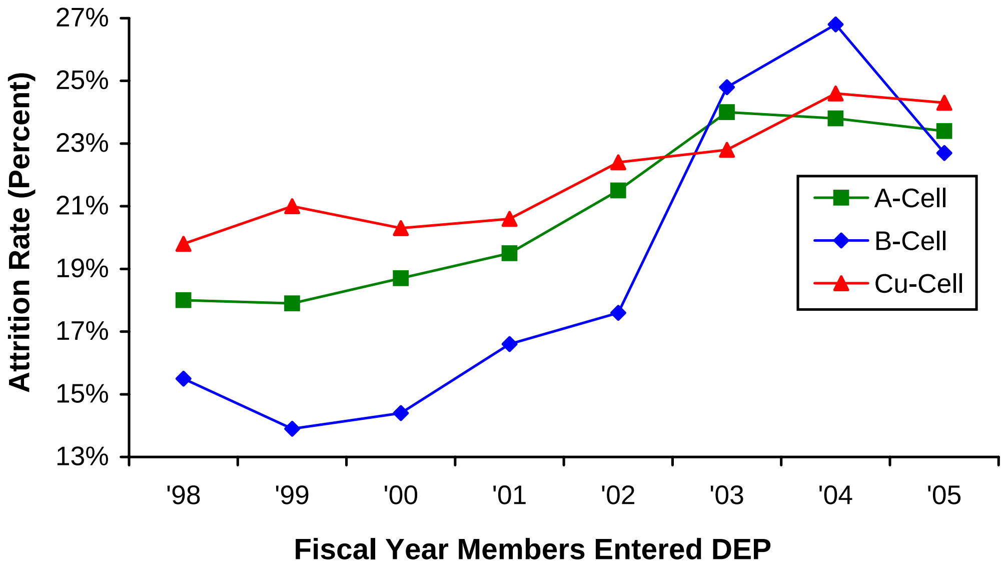
Figure 16 shows the percentage of DEP members in each Recruit Quality Matrix cell. A-Cell DEP accessions dropped and then leveled off between FY1998 and FY2001, and then steadily rose through FY2005. B-Cell accessions showed an opposite trend to A-Cell accessions. Cu-Cell accessions remained fairly constant through FY2002, and then dropped through FY2005. The Navy raised the minimum AFQT score required to enlist (from 31 to 35th percentile) in 2003, causing a reduction in the number of Cu-Cell members.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 16. Percent of DEP Members by Recruit Quality Matrix Cell and Year of Entry, Fiscal Years 1998-2005o

Somewhat surprisingly, Tier I recruits (A-Cell and Cu-Cell) had higher DEP attrition rates than did their counterparts in Tiers II and III (B-Cell). Figure 17 shows that from FY1998 through FY2002, Cu-Cell DEP members had the highest attrition rates, A-Cell DEP members were a few percentage points lower, and B-Cell DEP members had the lowest rates. In FY2003 and FY2004, attrition rates for B-Cell DEP members increased dramatically, peaking at nearly 27 percent. Attrition rates for A-Cell DEP members surpassed those of Cu-Cell DEP members in FY2003 and then dropped back below the Cu-Cell in FY2004.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 17. Attrition Rates of DEP Members by Quality Matrix Cell and Year of Entry, Fiscal Years 1998-2005

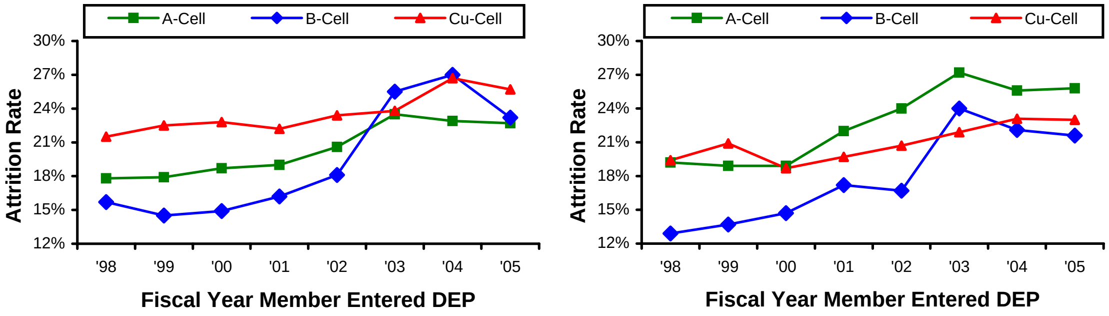
As Table 6 shows, DEP attrition rates from 1998 to 2005 for Tier I recruits were about 3 points higher than those for Tier II and Tier III recruits.

Table 6. DEP attrition Rates by Education Tier and Recruit Quality Matrix Cell

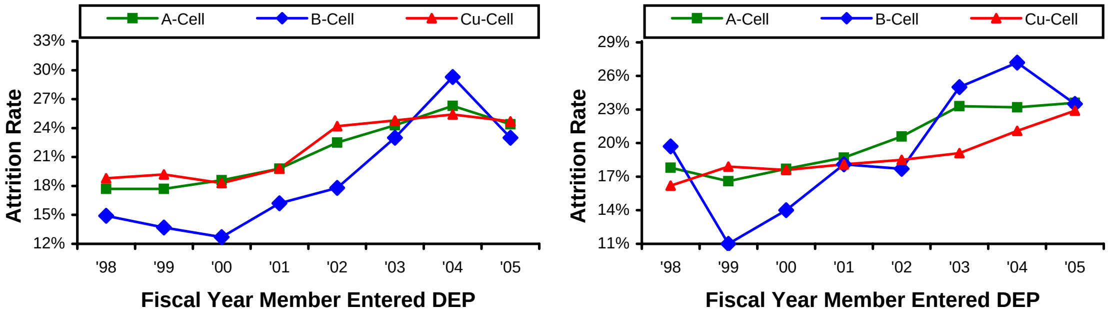
	Recruit Quality Matrix Cell (Percent Attrition)			
Education Tier	A-Cell	B-Cell	Cu-Cell	Total
Tier I	20.8		21.7	21.1
Tier II		17.8		17.8
Tier III		17.4		17.4
Total	20.8	17.7	21.7	20.9

Source: Derived from PRIDE data files (CNRC, 2007).

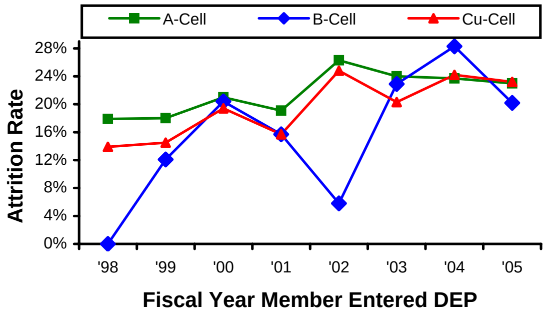
Attrition trends for White DEP members by Recruit Quality Matrix cell closely resemble the overall trends, as seen in Figure 18. Black members exhibit a different trend, with A-Cell members typically having the highest attrition rates. A-Cell and Cu-Cell Hispanic members have attrition trends quite similar to each other. A and Cu-Cell API/NatAm members have trends very similar to each other through FY2001 then diverge through FY2003 and converge again through FY2005.



— White — — Black —



— Hispanic — — API/NatAm —

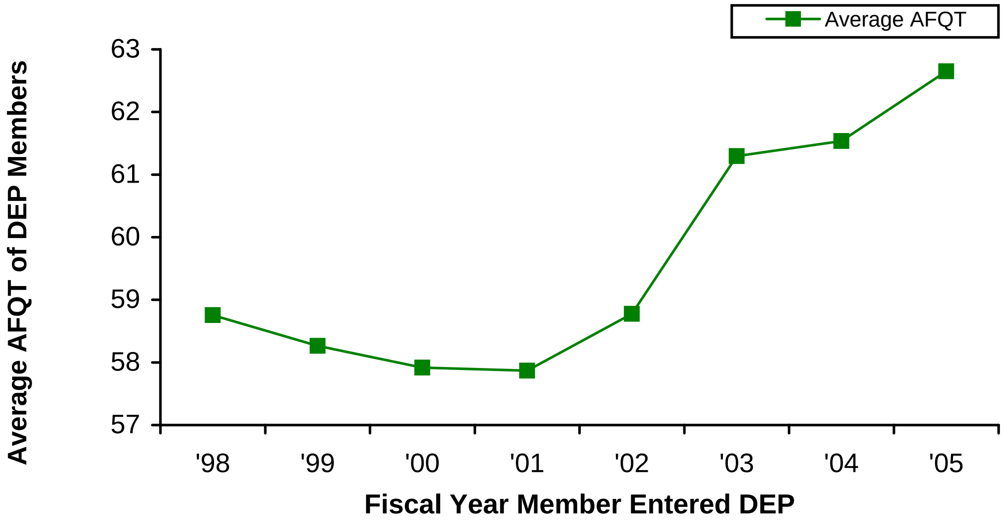


— Other —

Source: Derived from PRIDE data files (CNRC, 2007).

Figure 18. DEP Attrition Rates by Race/Ethnicity, Recruit Quality Matrix Cell, and Year of Entry , Fiscal Years 1998-2005

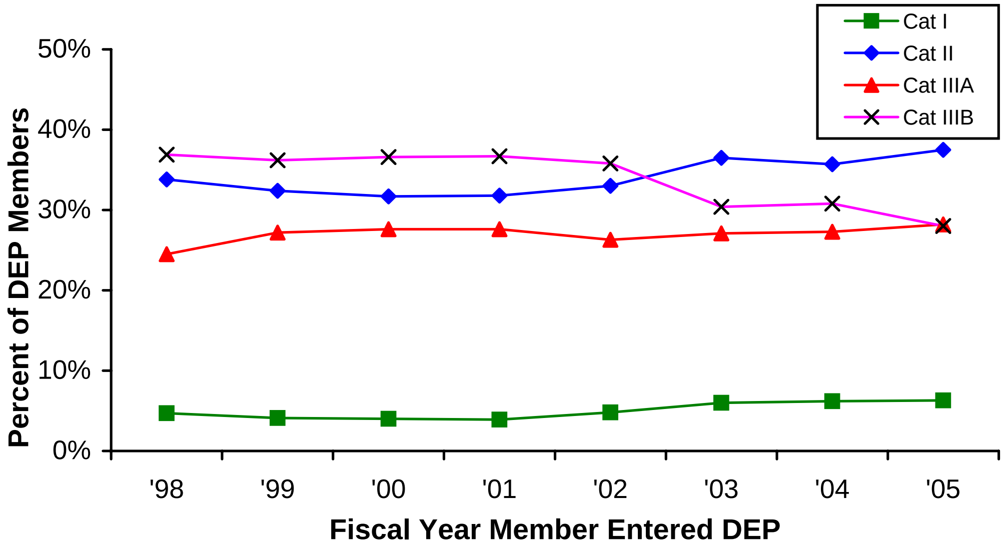
Over the period of this analysis, average AFQT scores have increased. Figure 19 shows that scores dropped slightly between FY1998 and FY2001, reaching a low of just less than 58. Since FY2002, scores have steadily risen, reaching a high of nearly 63 in FY2005. The rise in average AFQT can be attributed to CNRC focusing recruiting efforts on high-quality applicants, that is, persons with a traditional high school diploma and who score above the 50th percentile on the AFQT. CNRC also raised the minimum AFQT from 31 to 35 in FY2003 causing the large increase between FY2002 and FY2003.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 19. Average AFQT Percentile Score of DEP Members by Year of Entry, Fiscal Years 1998-2005

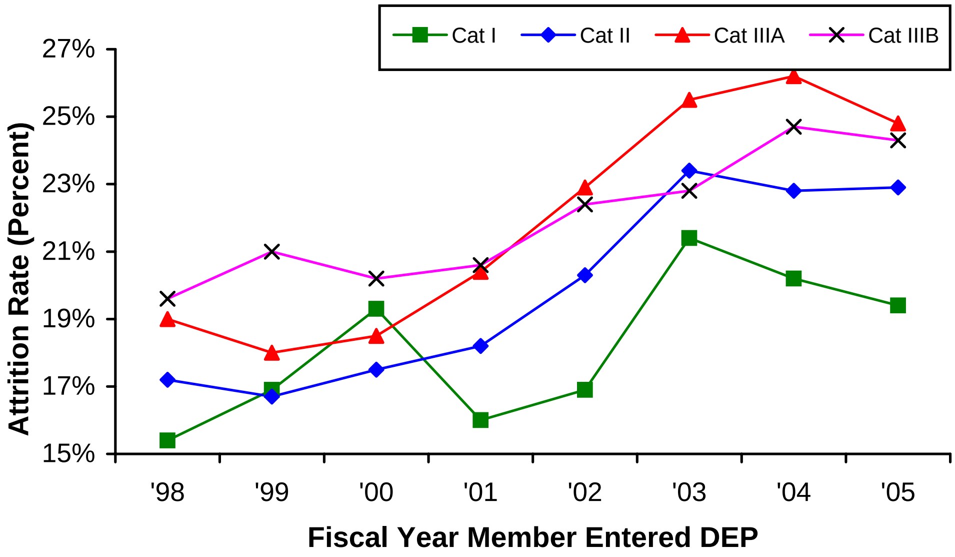
Figure 20 shows that, through FY2002, the percentages of DEP members in each AFQT category remained fairly constant, with Category IIIB comprising the greatest percentage of new DEP members. From FY2003 to FY2005, the percentage of Category IIIB members steadily dropped, while the percentages in Categories I, II, and IIIA steadily climbed.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 20. Percent of DEP Members by AFQT Category and Year of Entry, Fiscal Years 1998-2005

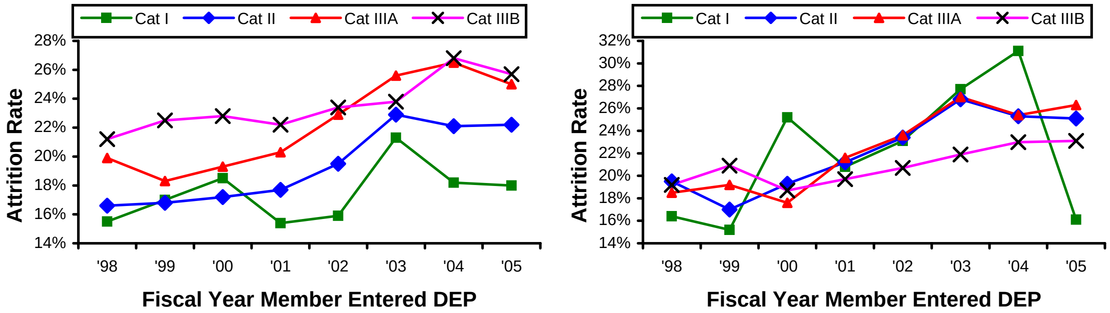
Figure 21 shows DEP attrition rates by AFQT category. Between FY1998 and FY2001, attrition rates were generally inversely proportional to AFQT category, with Category IIIB members having the highest rates and Category I members having the lowest rates. Beginning in FY2002, Category IIIA members overtook Category IIIB members for the highest rates. Attrition rates by AFQT Category appear highly correlated with time in DEP.



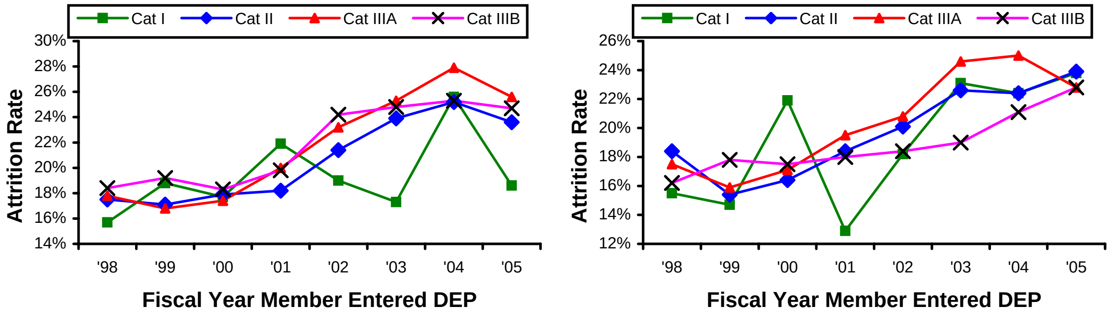
Source: Derived from PRIDE data files (CNRC, 2007).

Figure 21. DEP Attrition Rates by AFQT Category and Year of Entry, Fiscal Years 1998-2005

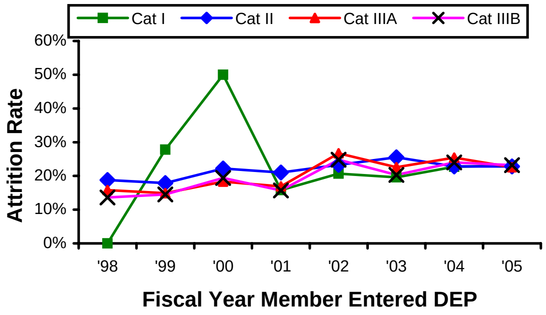
Attrition rates tend to vary widely among racial/ethnic groups and AFQT categories. Figure 22 (a) shows that, for White DEP members, as AFQT category increases, attrition rates decrease. Among Black and API/NatAm DEP members, those in AFQT Category IIIB typically have the lowest attrition rates. At the same time, Category IIIA Hispanics and API/NatAms typically have some of the highest rates.



— White — — Black —



— Hispanic — — API/NatAm —



— Other —

Source: Derived from PRIDE data files (CNRC, 2007).

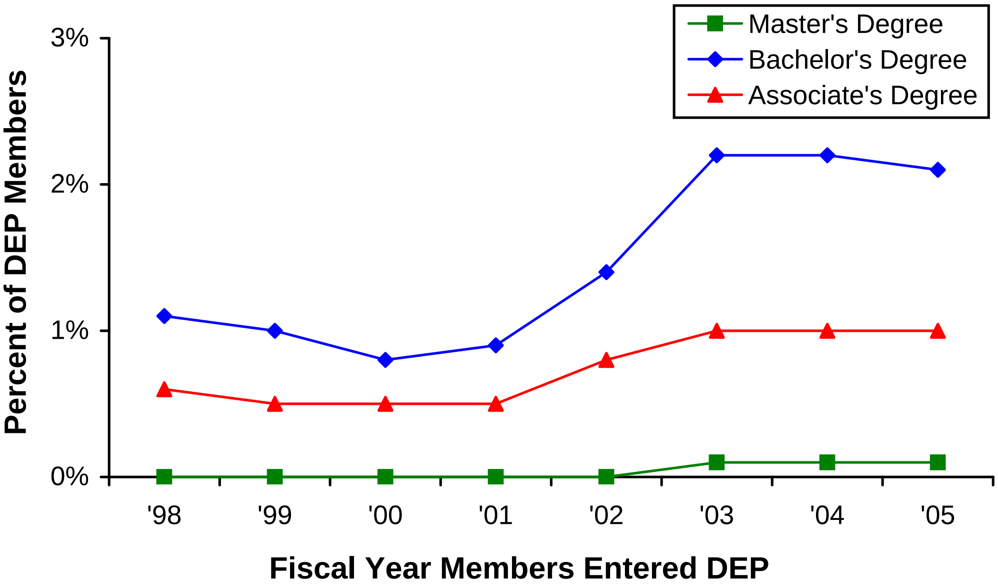
Figure 22. DEP Attrition Rates by Race, AFQT Category, and Year of Entry, Fiscal Years 1998-2005

3. DEP Enlistment and Attrition Trends by Education Credential

Although various personal characteristics have been linked to DEP attrition, years of formal education and type of education credential have consistently proven to be significant predictors of attrition. Tables 52 and 53 in Appendix A provide information on the number and percentage of new DEP members within each education credential by fiscal year. More than 92 percent of all new DEP members were classified in the Tier I education category, including over 53 percent with a traditional high school diploma or college degree. Approximately 31 percent of DEP members were high school seniors, and just over 7 percent were non-traditional Tier I credential holders. About 4.5 percent of new DEP members were Tier II; GED holders formed the largest subgroup, at approximately 4 percent of all new DEP members. Non-graduates (Tier III) constituted only 2.9 percent of all new members.

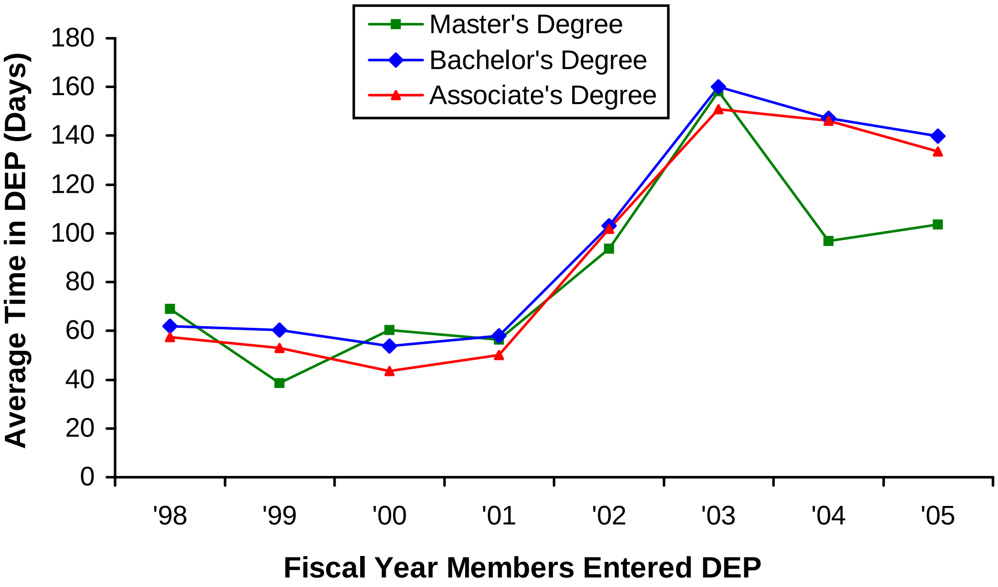
Figure 23 provides information on DEP members possessing a college degree grouped by degree type and fiscal year. It shows that although relatively few new DEP members possessed a college degree, the proportion of college-degree-holders increased between FY2000 and FY2003, when it leveled off.

Figure 24 shows average time in DEP by college degree. In each group, the trend generally follows the overall trend. DEP times are relatively stable through FY2001, increase dramatically through FY2003, and then drop through FY2005.



Source: Derived from PRIDE data files (CNRC, 2007).

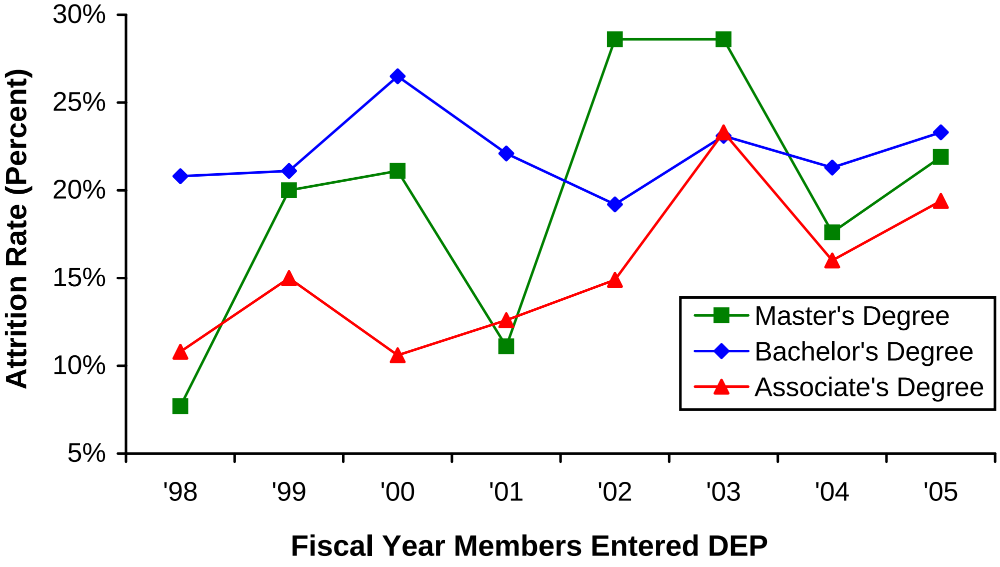
Figure 23. Percent of DEP Members Who Earned a College Degree by Type of Degree and Year of Entry, Fiscal Years 1998-2005



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 24. Average Time in DEP of DEP Members Who Earned a College Degree by Type of Degree and Year of Entry, Fiscal Years 1998-2005

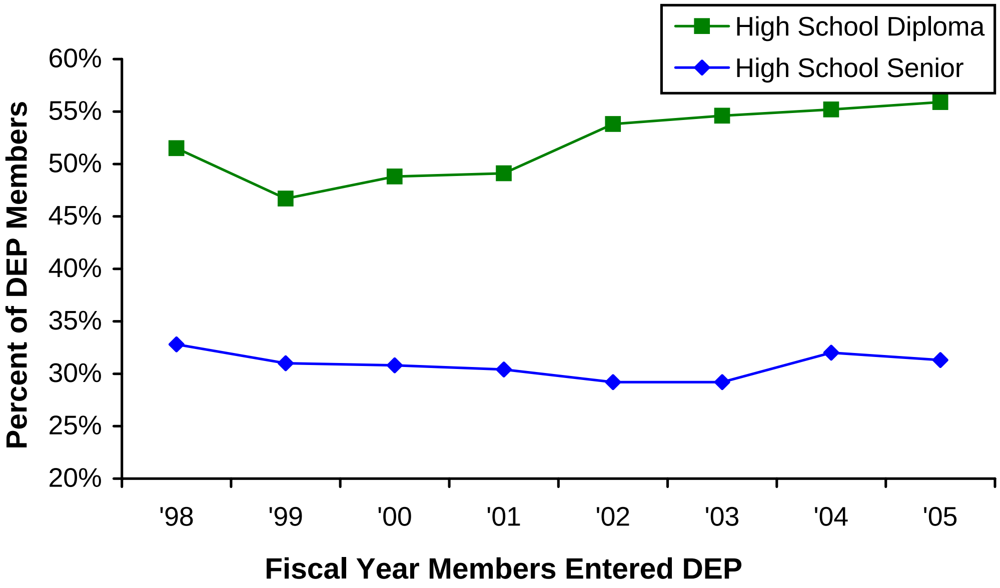
Attrition rates by fiscal year are shown in Figure 25. As seen here, each college groups has a widely varying attrition rate over the time period of this study. Among the three categories of college degrees, DEP members with a Bachelor's degree are most consistent from year-to-year, with the highest attrition rate in six of the eight years covered from FY1998 through FY2005. At the same time, DEP members with an Associate's degree have the lowest attrition rate in six of the eight years examined in the study.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 25. Attrition Rates of DEP Members Who Earned College Degrees by Fiscal Year

Figures 26 through 28 provide similar information on traditional high school diploma graduates and high school seniors. Traditional high school graduates comprised just over 50 percent of all new DEP members with an increasing proportion in every year since FY1999. High school seniors comprised just over 30 percent of new DEP members and showed a slight downward trend from FY1998 through FY2003.

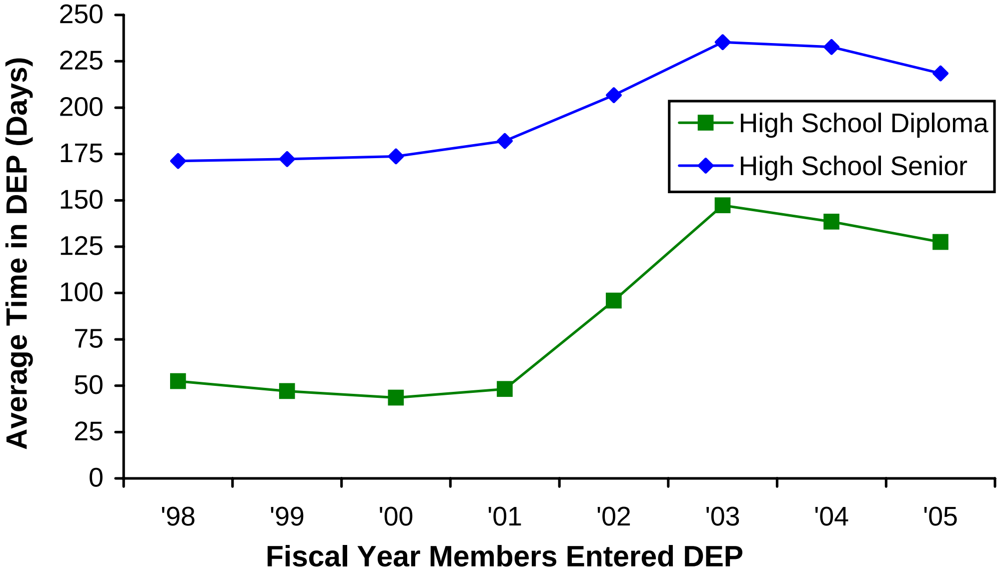


Source: Derived from PRIDE data files (CNRC, 2007).

Figure 26. Percent of DEP Members Who Were a High School Diploma Graduate or and Senior by Year of Entry, Fiscal Years 1998-2005

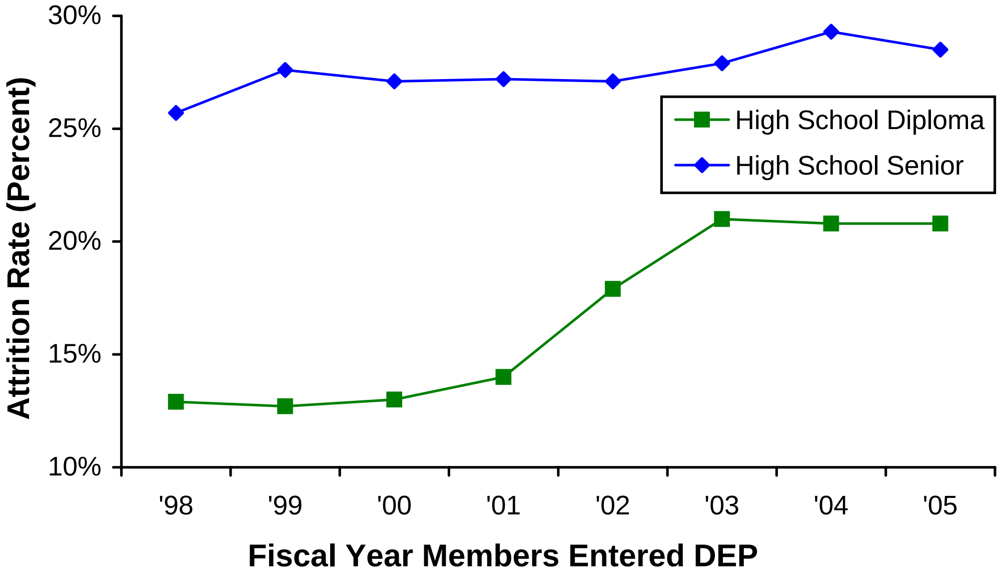
Average time in DEP is displayed in Figure 27. High school seniors have historically had very long DEP times due to the fact that they cannot ship to RTC before their high school graduation. Their average stays in DEP increased by over 60 days between FY1998 and FY2003. The increase was even more dramatic for high school graduates, as their time increased by over 100 days between FY2000 and FY2003.

Figure 28 shows that attrition rates for high school seniors have risen by three percentage points during the time period, while rates for high school diploma graduates have risen by eight points. Attrition for graduates appears to be strongly correlated with time in DEP.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 27. Average Time in DEP of DEP Members Who Were a High School Diploma Graduate or Senior by Year of Entry, Fiscal Years 1998-2005

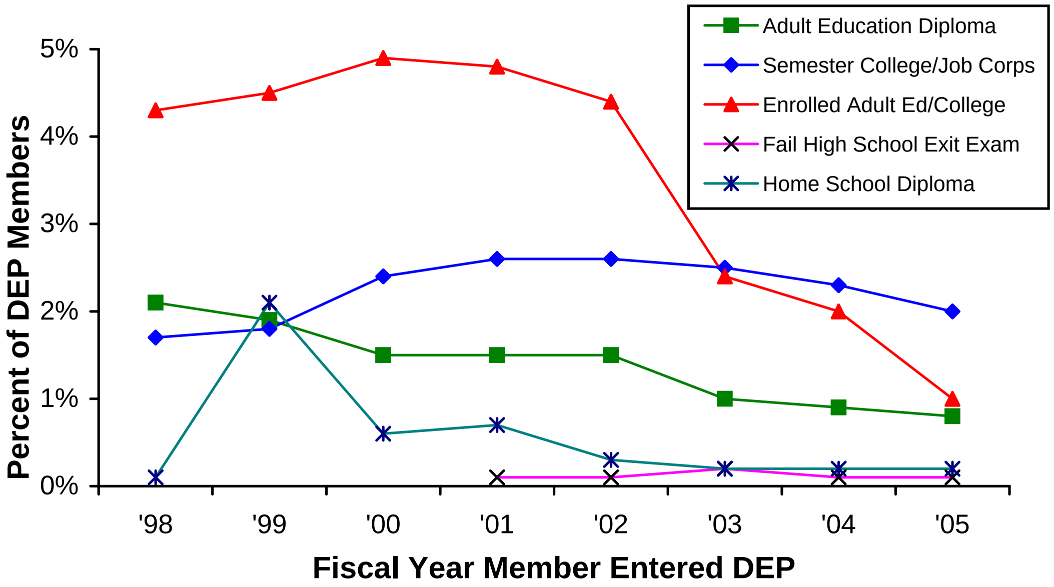


Source: Derived from PRIDE data files (CNRC, 2007).

Figure 28. Attrition Rates of DEP Members Who Were a High School Diploma Graduate or Senior by Year of Entry, Fiscal Years 1998-2005

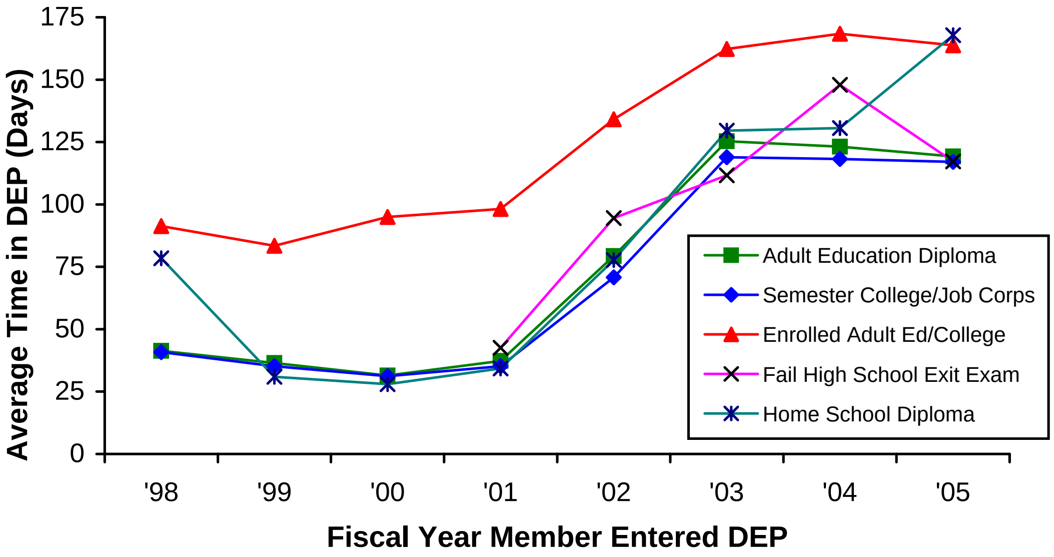
Figure 29 provides information on DEP members possessing alternative Tier I education credentials grouped by fiscal year. Adult Education diploma holders have declined steadily as a proportion of total DEP members. The proportion of persons who have a GED and earned 15 college credits or a Job Corps certificate of completion increased between FY1998 and FY2001 and then declined slightly through FY2005. DEP members who were enrolled in adult education courses or 15 college credits increased slightly between FY1998 and FY2000, and dropped considerably through FY2005. The credential for DEP members who completed high school but failed their exit exam was created in FY2001. Very few members have been recruited from this category and total percentage has steadily hovered at approximately 0.1 percent. The proportion of home school diploma holders spiked upward between FY1998 and FY1999, then quickly dropped again in FY2000. By FY2000 the percentage of new DEP members in this category dropped and leveled off at approximately 0.2 percent.

DEP times are shown in Figure 30. Average time in DEP for members enrolled in adult education or 15 college credits has historically been longer than the times for persons from other non-traditional categories. These members cannot ship to RTC until they complete their education programs, and therefore must be in DEP for an extended period. Persons in the other categories show similar times in DEP, which also corresponds with the overall average time in DEP.



Source: Derived from PRIDE data files (CNRC, 2007).

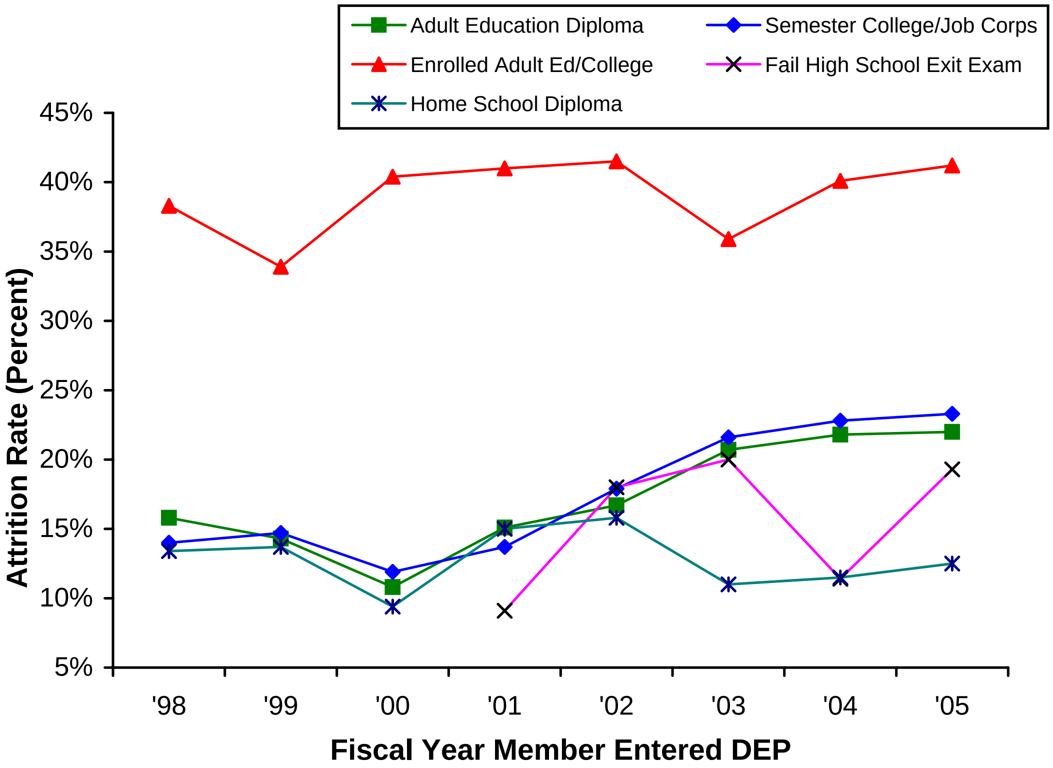
Figure 29. Percent of DEP Members Who Possessed a Non-traditional Tier I Education Credential by Type of Credential and Year of Entry, Fiscal Years 1998-2005



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 30. Average Time in DEP of Non-traditional Tier I Education Credential Holders by Type of Education Credential and Year of Entry, Fiscal Years 1998-2005

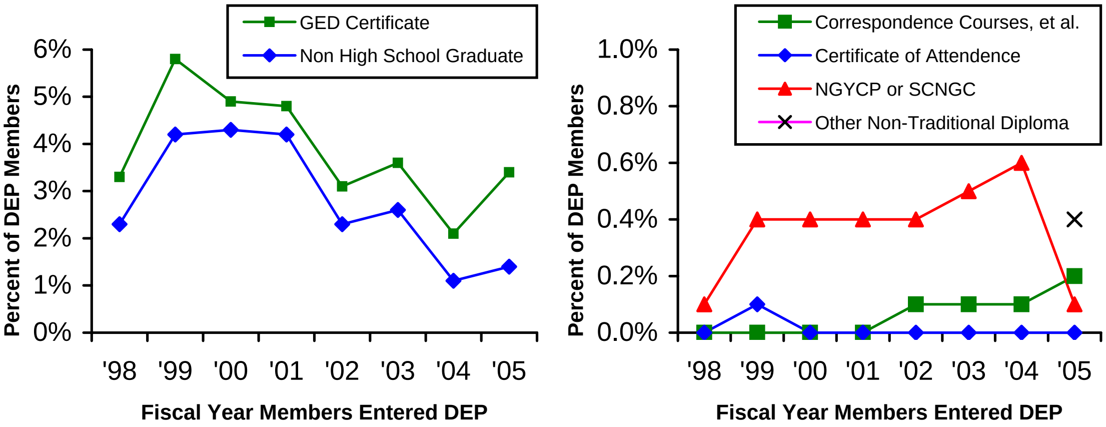
Attrition rates for non-traditional Tier I members are shown in Figure 30. DEP members enrolled in adult education or college have the highest rates of attrition of any group in this study, averaging 39 percent over the time period of this study. Unlike other groups, the attrition rates for this group do not appear correlated with time in DEP. The remaining non-traditional Tier I groups showed similar attrition rates through FY2002. Home school graduates diverged from the group in FY2003 and thereafter had a lower attrition rate. Adult education graduates and those with a GED who had also completed a semester of college or Job Corps program have remarkably similar attrition rates over the entire range of the study. The newest education credential holders, persons who completed high school but failed an exit exam, had similar attrition rates to those of adult education diploma graduates.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 31. Attrition Rates of Non-traditional Tier I Education Credential Holders by Fiscal Year

Figure 32 provides information on DEP members possessing Tier II or Tier III education credentials grouped by fiscal year. GED certificate holders comprised the greatest percentage of non-Tier I DEP members, followed by non-graduates. The percentage of DEP members in these groups followed similar trends. Each group peaked in FY1999 and dropped through FY2002. The percentages then increased in FY2003, dropped in FY2004, and increased again in FY2005. The remaining Tier II categories together comprised less than 1 percent of all new recruits for each fiscal year.



— GED and Non-Grad —

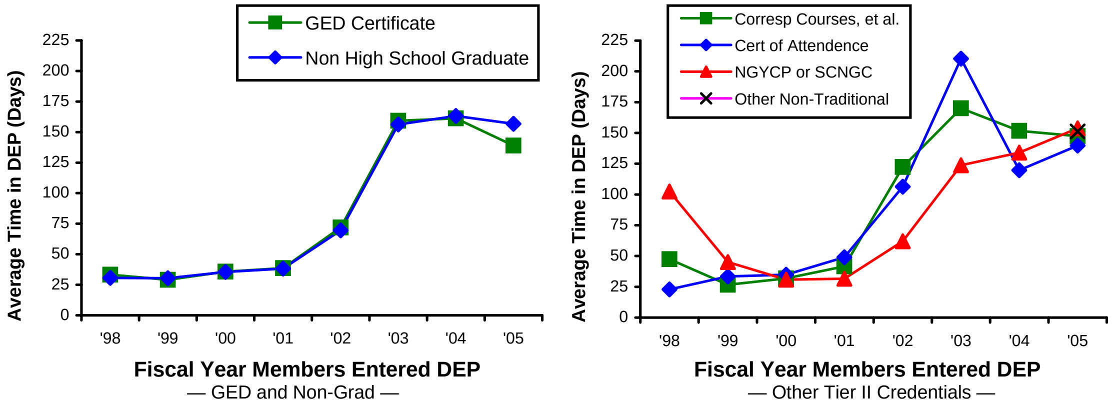
— Other Tier II Credentials —

Source: Derived from PRIDE data files (CNRC, 2007).

Figure 32. Percent of DEP Members Who Possessed a Tier II or Tier III Education Credential by Type of Credential and Year of Entry, Fiscal Years 1998-2005

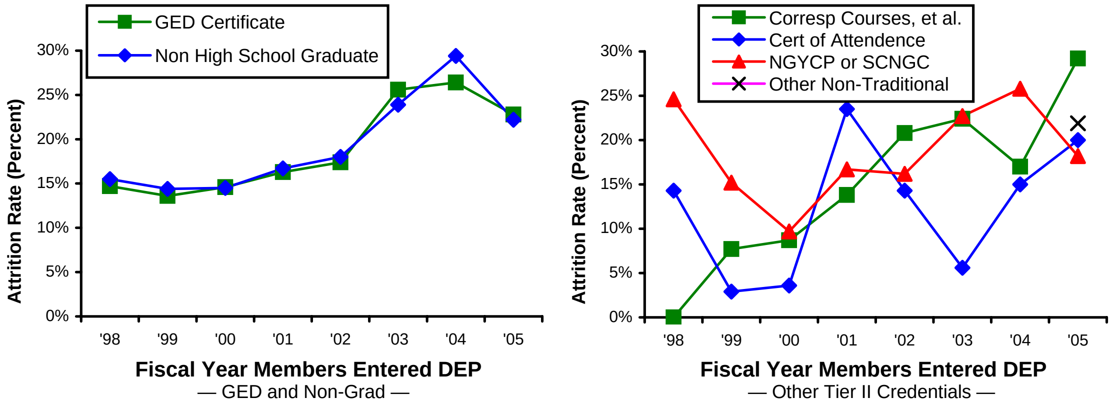
Average time in DEP for Tiers II and III education credential holders are shown in Figure 33. Times in DEP for members with each credential were very similar over the time period covered by this study. Prior to FY2002, persons in Tiers II and III stayed a relatively short time in the DEP, typically less than 50 days. In FY1999, the average time in DEP for Tiers II and III DEP members was just over 30 days; by FY2003, the average time in DEP had jumped to over 160 days, and, by FY2005, it had fallen to below 150 days. It should be noted that CNRC changed the requirements for Tier II and Tier III DEP members to stay in the DEP for at least 90 days in FY2003.

Attrition rates varied widely among the education groups. Figure 34 shows that the two largest groups, GED holders and non-graduates, had similar attrition rates, and their trends matched the overall attrition trend. The other groups, each with relatively few members, exhibited greater variability in attrition rates.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 33. Average Time in DEP of DEP Members Who Possessed a Tier II or III Education Credential by Type of Credential and Year of Entry, Fiscal Years 1998-2005



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 34. Attrition Rates of DEP Members Who Possessed a Tier II or Tier III Education Credential by Type of Credential and Year of Entry, Fiscal Years 1998-2005

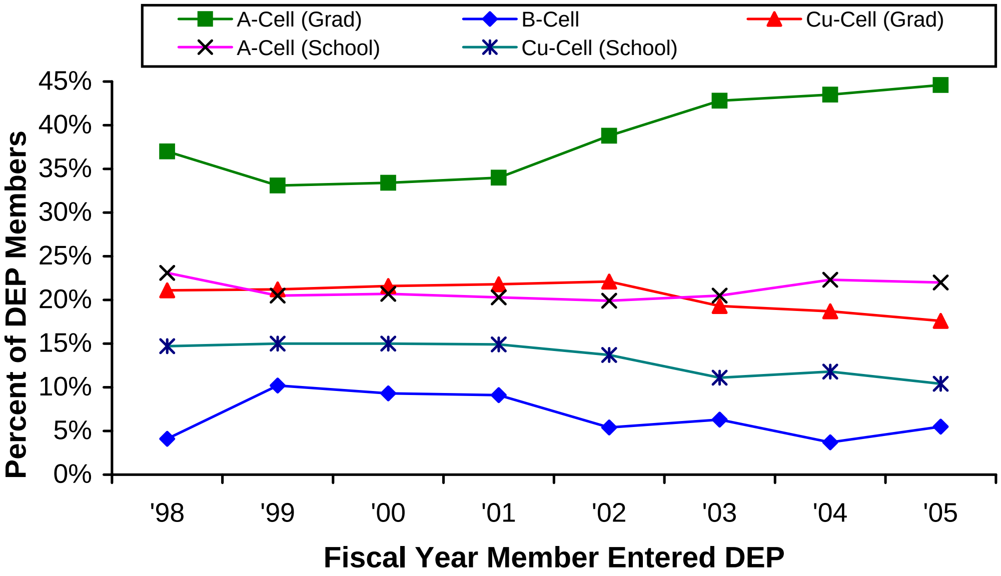
Based on the previous analysis, DEP members pursuing an education credential tend to have much higher attrition rates. Members earning an adult education diploma or 15 college credits tend to have the highest average attrition rates (39 percent) and high school seniors have the second-highest average attrition rates (27.5 percent). Table 7 shows that Tier I (A-Cell and Cu-Cell) attrition rates drop significantly (compared with Table 6) when members in school are separated into their own categories.

Table 7. DEP Attrition Rates by Education Tier and Recruit Quality Matrix Cell (With DEP Members in School Removed from A and Cu Cells)

	Recruit Quality Matrix (Percent Attrition)					
Education Tier	A-Cell (Graduate)	B-Cell	Cu-Cell (Graduate)	A-Cell (School)	Cu-Cell (School)	Total
Tier I	17.4		15.2	26.9	31.6	21.1
Tier II		17.8				17.8
Tier III		17.4				17.4
Total	17.4	17.6	15.2	26.9	31.6	20.9

Note: DEP members in school include high school seniors, members pursuing an adult education diploma, and GED holders earning 15 college credits.
Source: Derived from PRIDE data files (CNRC, 2007).

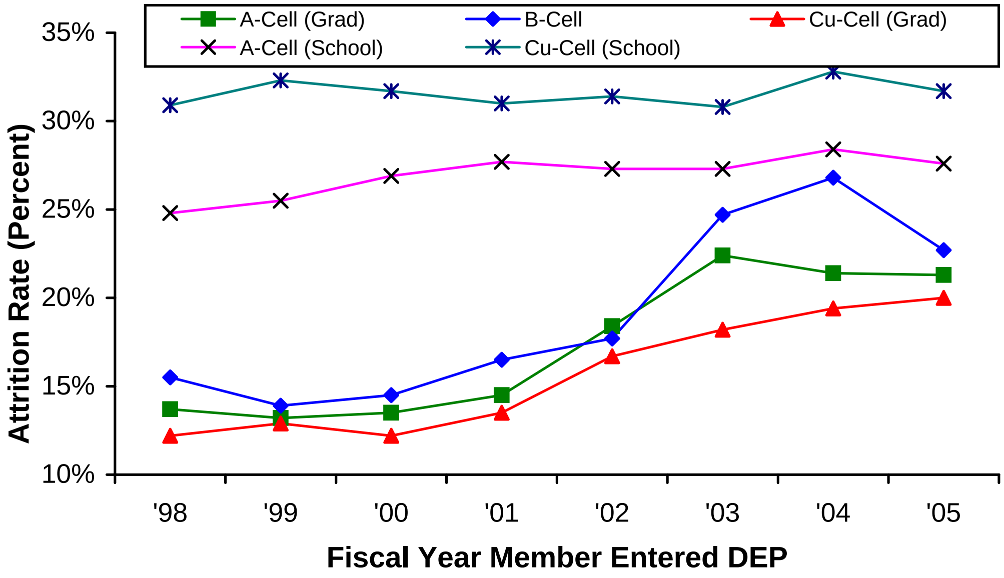
The percent of DEP members in each Recruit Quality Matrix cell, when those in school are removed, show little variation. As seen in Figure 35, the percent of A-Cell members increased by 11.5 points and B-Cell members decreased by 4.7 points between FY1999 and FY2005. The number of Cu-Cell members dropped by 3.6 points over the same period. A-Cell DEP members in school increased by 1.4 percentage points while Cu-Cell members dropped by 4.6 points.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 35. Percent of DEP Members by Quality Matrix Cell (With DEP Members in School Removed from A and Cu Cells) by Year of Entry, Fiscal Years 1998-2005

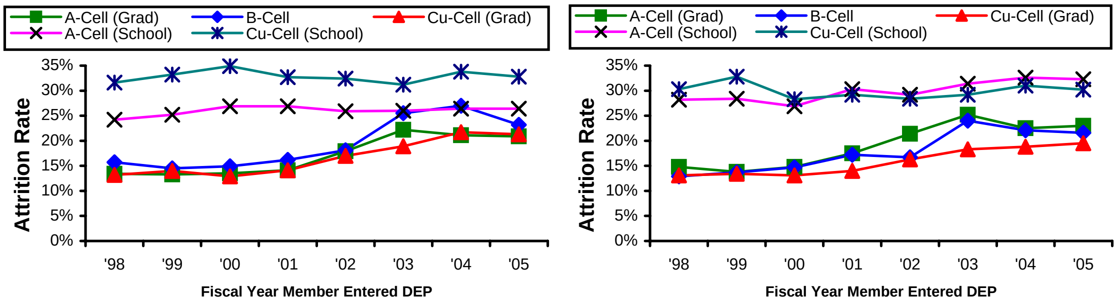
Figure 36 shows DEP attrition rates by Recruit Quality Matrix Cell and year of entry with DEP members attending school separated from the A and Cu Cells. Cu-Cell DEP members show the lowest attrition rates, A-Cell members just higher than Cu-Cell, and B-Cell just higher than A-Cell members. A-Cell, B-Cell, and Cu-Cell attrition trends appear highly correlated with average time in DEP. DEP members still attending school display similar trends, but quite different from other DEP members. Attrition rates for these two groups are fairly stable, with A-Cell members in school averaging 26.9 percent attrition and Cu-Cell members in school averaging 31.6 percent DEP attrition.



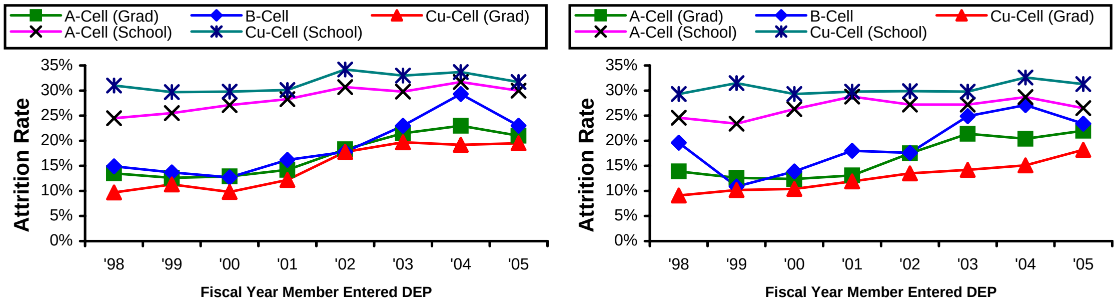
Source: Derived from PRIDE data files (CNRC, 2007).

Figure 36. Attrition Rates of DEP Members by Quality Matrix Cell (With DEP Members in School Removed from A and Cu Cells) by Year of Entry, Fiscal Years 1998-2005

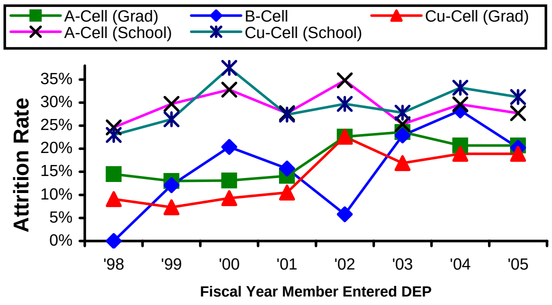
When DEP members who were in school are isolated from the recruit quality matrix by race and ethnicity, some interesting trends are revealed (Figure 37). Typically, A-Cell members in school show lower attrition rates than do Cu-Cell members in school. White members in school show the widest gap between the A and Cu Cells, averaging 7 percentage points. Black members in school have the narrowest average difference between and A and Cu cells, at just 0.2 points. Hispanics, API/NatAms, and Others averaged 3.0, 3.8, and 1.9 percentage points, respectively.



— White —   — Black —



— Hispanic —   — API/NatAm —



— Other —

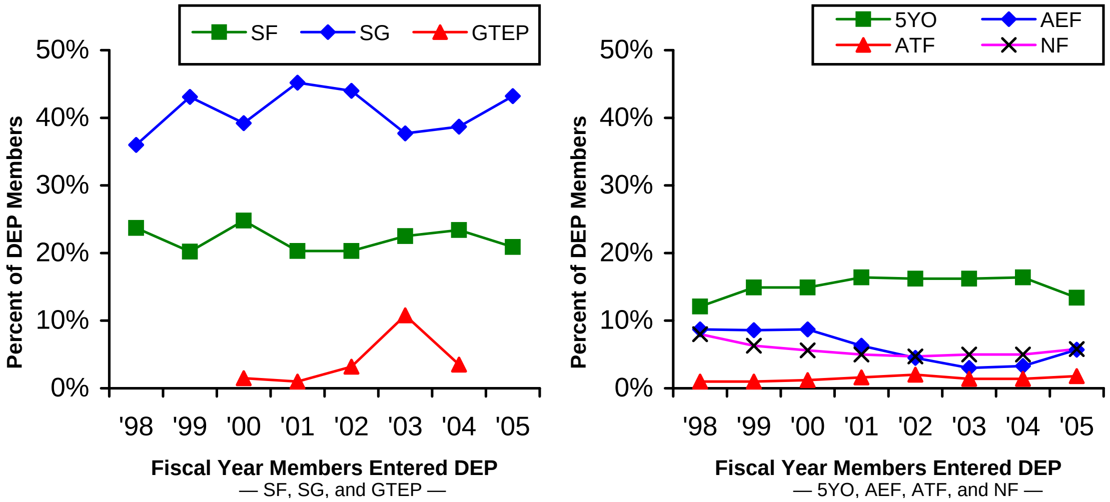
Source: Derived from PRIDE data files (CNRC, 2007).

Figure 37. DEP Attrition Rates by Race, Recruit Quality Matrix Cell (Members in School Separated) and Year of Entry, Fiscal Years 1998-2005

4. DEP Enlistment and Attrition Trends by Enlistment Program

The analysis in this section is based on the DEP members' enlistment program at the time they exited the DEP, either by shipping to RTC or attriting. Figure 38 shows the trends in the various active component enlistment programs.

The School Guarantee (SG) program consistently had the greatest percentage of new DEP accessions. The percentage of members in the SG program fluctuated during the time frame covered in this study. When the percentage of SG members was low, there was a corresponding high point in one of the other enlistment programs. For example, in FY2000, the percentage of SG members dropped while the percentage of members in the Seafarer (SF) program jumped correspondingly. Another drop in SG percentage occurred in FY2003 and was offset by an increase in the GENDET Targeted Enlistment Program (GTEP). GTEP was a short-lived program that began in FY2000, peaked at 10.8 percent in FY2003, and was discontinued after FY2004. The SG program with a five-year obligor (5YO) experienced a gradually increasing trend through FY2004 and dropped slightly in FY2005. The six-year obligor programs, Advanced Electronics Field (AEF), Advanced Technical Field (ATF), and Nuclear Field (NF), were relatively stable over time, with the largest variation occurring in the AEF program.

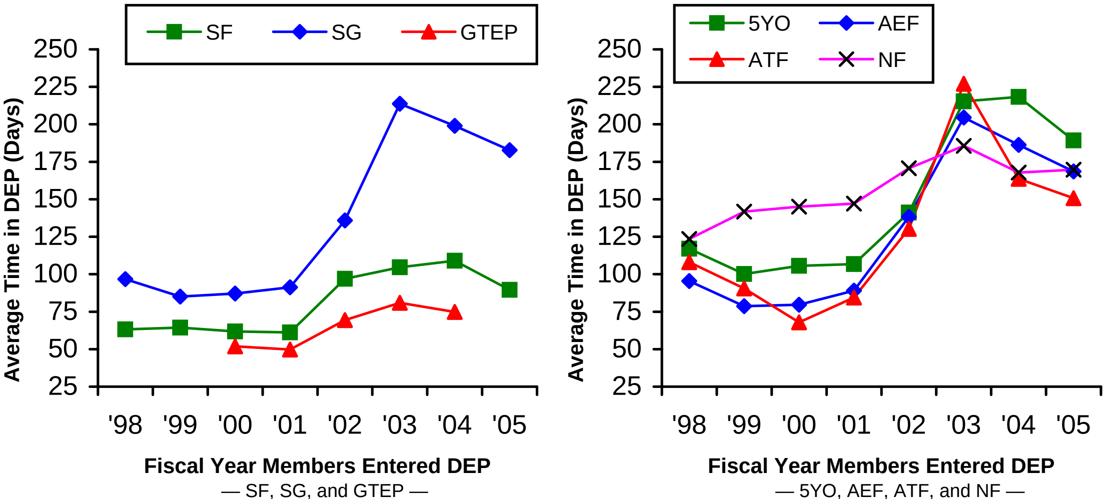


Source: Derived from PRIDE data files (CNRC, 2007).

Figure 38. DEP Accession Percents by Active Component Enlistment Program and Year of Entry, Fiscal Years 1998-2005

Average time in DEP of the enlistment programs varied widely between programs. Figure 39 shows that SG, 5YO, AEF, and ATF were generally similar for time in DEP. Times were relatively stable through FY2001, increased dramatically through FY2003, and dropped slightly through FY2005. The SF program showed a slightly different trend. Times stayed consistently around 65 days through FY2001, increased less dramatically through FY2004, and dipped slightly in FY2005. The GTEP program was only available for a few years, and each year DEP members in this program had the shortest wait time in DEP. The NF program also showed a less dramatic increase in DEP times.

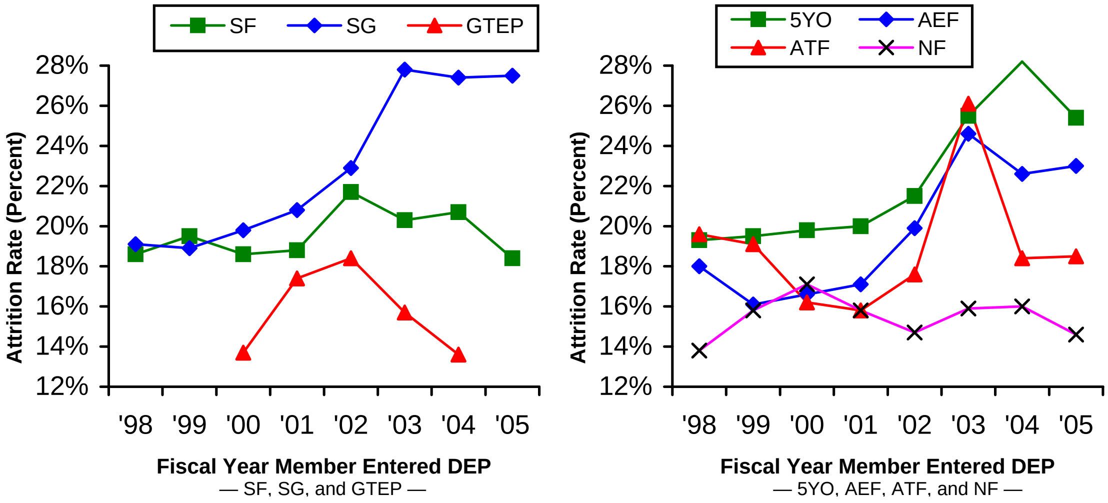
The NF training program is “level loaded,” meaning RTC, the Nuclear Field A-Schools, the Nuclear Power School, and the Nuclear Power Training Units all receive a constant supply of NF sailors. Level loading requires a strict management of available training seats, which limits the number of NF recruits shipped to RTC each month. If training seats are not available, NF DEP members must wait until a seat opens. This results in longer-than-average DEP times for each year that did not vary as much as the other school guarantee programs.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 39. Average Time in DEP by Active Component Enlistment Program and Year of Entry, Fiscal Years 1998-2005

Attrition rates also varied widely over time and between programs. Figure 40 shows the SF program had stable attrition rates through FY2001, jumped up in FY2002, and dropped through FY2005. SG and 5YO programs had similar attrition trends and rates, with the lowest rates in FY2000 and highest in FY2004. AEF DEP members had lower rates of attrition, compared with SG members, but rates followed the same general trend. ATF program members showed the widest variation in attrition rates. Rates dropped through FY2001, peaked in FY2003 at a very high rate, and dropped significantly through FY2005. The NF program showed a very different trend, compared with the other programs. Rates increased through FY2000, dropped again through FY2002, increased through FY2004, and then dropped again. This program consistently had low attrition rates due to the strict program requirements and extra commitment on the DEP members' part to join as a Nuclear Plant Operator. The GTEP program had very low attrition rates, increasing through FY2002 then decreasing through the last year of the program. The spread of attrition rates between the programs was only 3.7 percentage points in FY1999 and had reached 12.9 percentage points by FY2005.

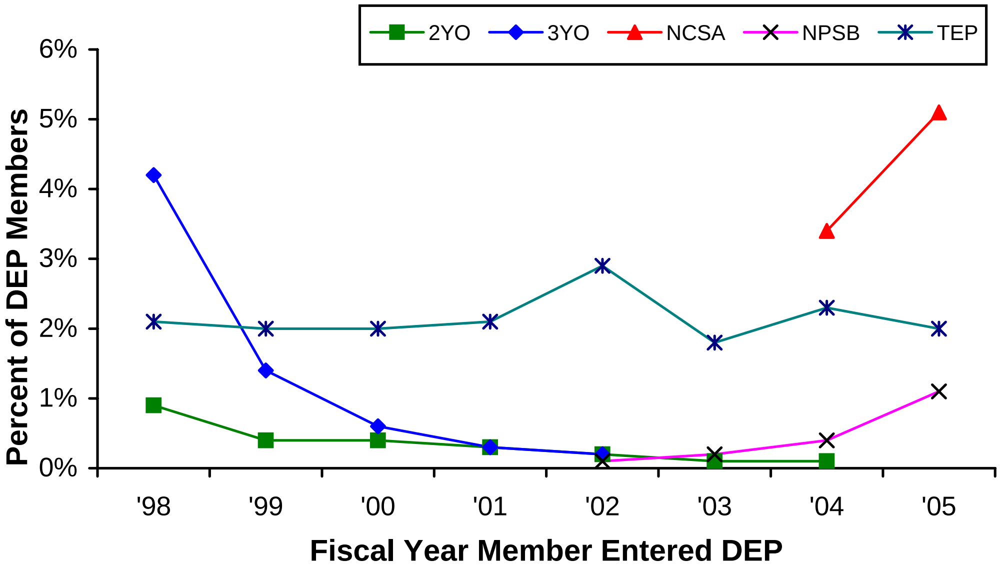


Source: Derived from PRIDE data files (CNRC, 2007).

Figure 40. Attrition Rates of DEP Members by Active Component Enlistment Program and Year of Entry, Fiscal Years 1998-2005

Figure 41 shows the trends in the various reserve component enlistment programs. The only program that was in existence over the complete time frame of this study was the Full Time Support (FTS) Enlistment Program (TEP). TEP averaged 2.2 percent of DEP accessions with a maximum of 2.9

percent in FY2002 and a minimum of 1.8 percent in FY2003. The two-year obligor program (2YO) never had more than 1 percent of total DEP accessions and was discontinued in FY2004. The three-year obligor program (3YO) had a relatively large percentage of enlistments in FY1998, over 4 percent, and quickly dropped below 1 percent before being discontinued in FY2002. The Non-Prior Service Basic (NPSB) program was created in FY2002 and every year since has shown a steady increase in DEP accessions. The newest program, National Call to Service (NCSA), was established in FY2004 and immediately gained priority in enlisted recruiting, jumping from 3.4 percent to 5.1 percent in one year.

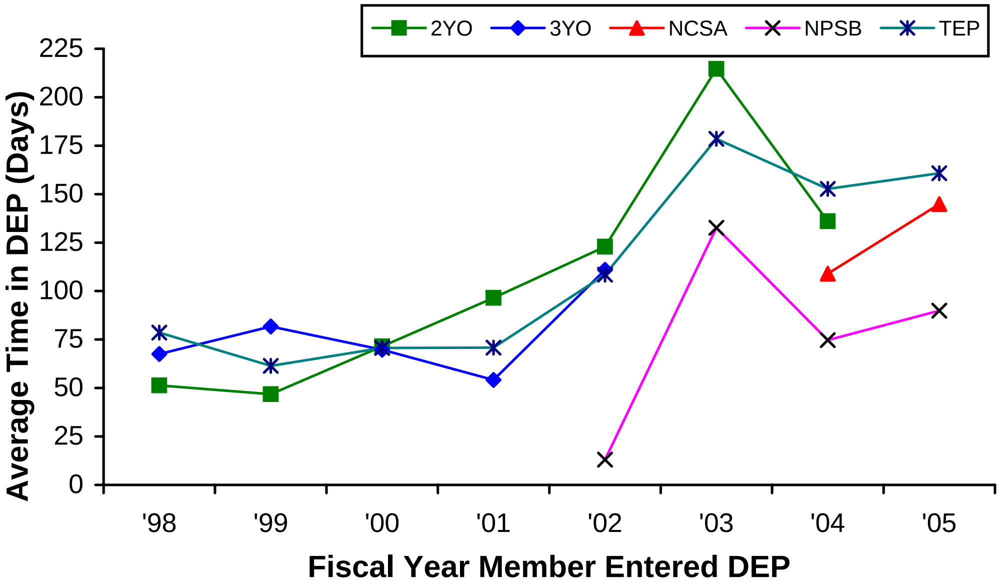


Source: Derived from PRIDE data files (CNRC, 2007).

Figure 41. Accession Rates of DEP Members by Reserve Component Enlistment Program and Year of Entry, Fiscal Years 1998-2005

Time in DEP varied widely among the Reserve programs and fiscal years. Figure 42 shows the 2YO, 3YO, and TEP programs followed similar trends to the Active programs:

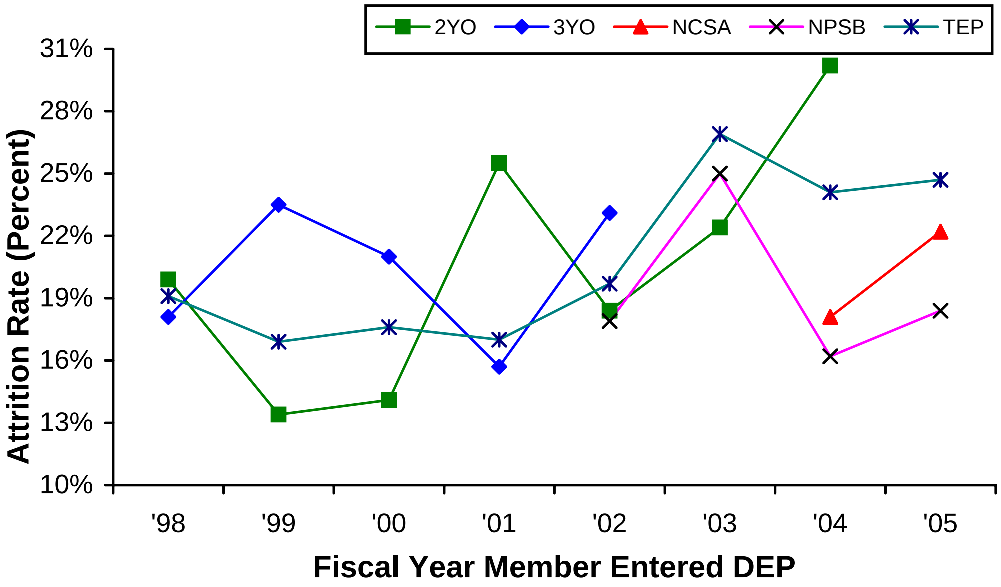
that is, shorter DEP times in early years and longer times in later years. The NPSB program was introduced in FY2002, with very few members joining the program and very short DEP times. Times jumped significantly in FY2003 and then dropped again in FY2004. For NCSA members, DEP times increased by approximately 35 days over the two years of the program.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 42. Average Time in DEP by Reserve Component Enlistment Program and Year of Entry, Fiscal Years 1998-2005

Attrition rates for Reserve programs also varied significantly between programs and fiscal years. The 2YO and 3YO programs showed attrition rates that were nearly mirror images of each other through FY2002. Following FY2002, rates for the 2YO program jumped up significantly. The TEP, NPSB, and NCSA programs' attrition profiles are almost perfectly correlated to the time in DEP profiles, with each increase or decrease reflected in both figures.

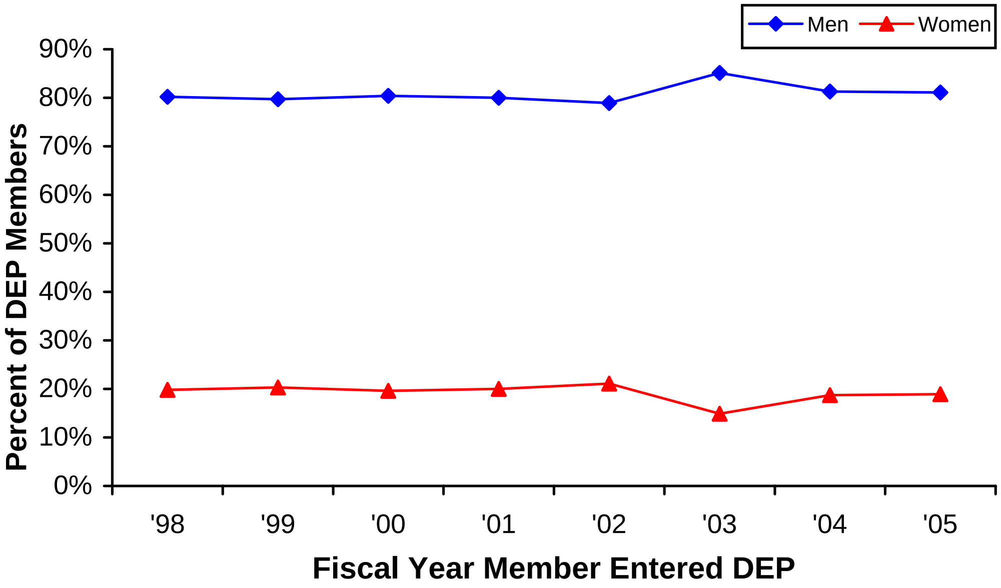


Source: Derived from PRIDE data files (CNRC, 2007).

Figure 43. Attrition Rates of DEP Members by Reserve Component Enlistment Program and Year of Entry, Fiscal Years 1998-2005

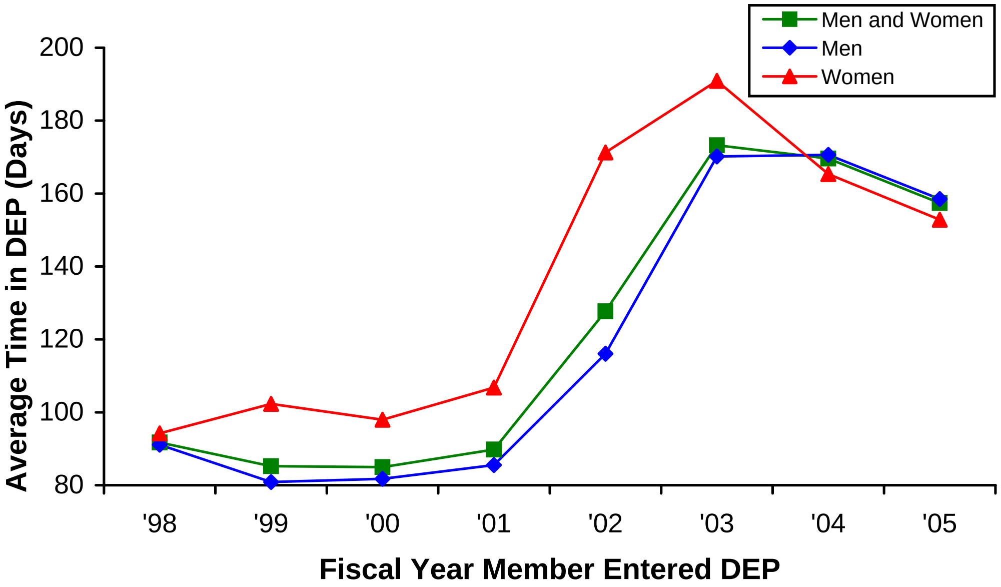
5. DEP Enlistment and Attrition Trends by Gender

Of the over 460,000 men and women who entered the Navy’s DEP between FY1998 and FY2005, just over 19 percent were women. Tables 60 and 61 in Appendix A provide information on the number and percentage of men and women who entered the DEP. Figure 44 shows that the relative percentages of men and women have remained fairly constant. The highest percentage of women is seen in FY2002 (21.1 percent), followed by FY2003 with the lowest percentage (14.9 percent). Average time in DEP was longer for women than for men through FY2003, as shown in Figure 45. In FY2004 and FY2005, DEP time for women dropped below that of men by five to six days.



Source: Derived from PRIDE data files (CNRC, 2007).

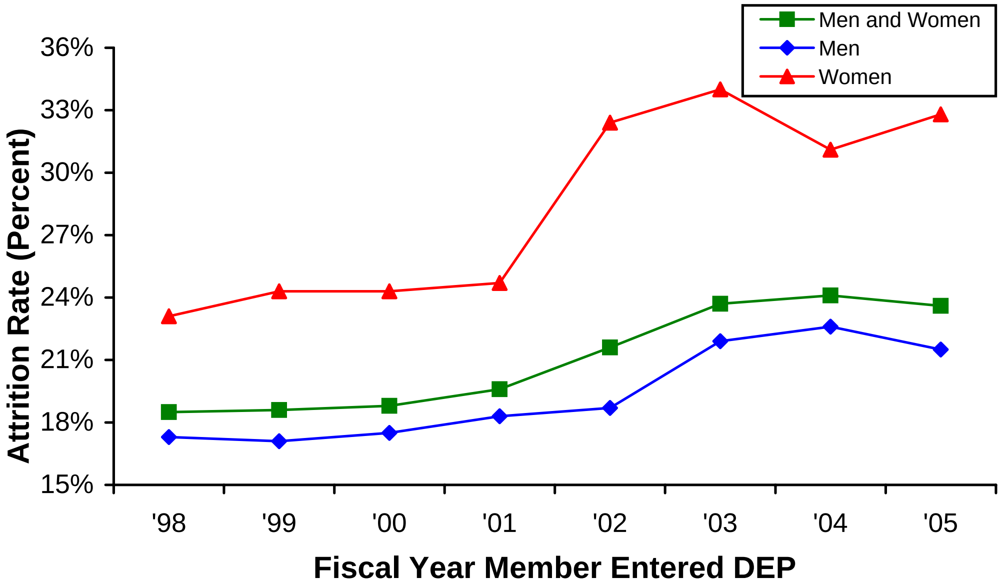
Figure 44. Percent of DEP Members by Gender and Year of Entry, Fiscal Years 1998-2005



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 45. Average Time in DEP by Gender and Year of Entry, Fiscal Years 1998-2005

Over the entire period of this study, women had significantly higher DEP attrition rates than did men. Figure 46 shows the rates for women jumped nearly 10 points between FY2001 and FY2003. This increase is closely correlated with the drastic jump in DEP times between those two years, and suggests that women could be more susceptible than men to leaving the DEP as DEP times increase. Attrition rates for men steadily increased through FY2004, and then dropped slightly. The difference between the maximum and minimum rates was only 5.5 percentage points.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 46. Attrition Rates for DEP Members by Gender and Year of Entry, Fiscal Years 1998-2005

Previous DEP attrition studies by Henderson[106] and Buddin[107] found that married DEP members are less likely to be discharged from DEP than are their single counterparts.

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[106] Henderson, An Analysis of Delayed Entry Program Attrition, 42.

[107] Buddin, Success of First-Term Soldiers, 26.

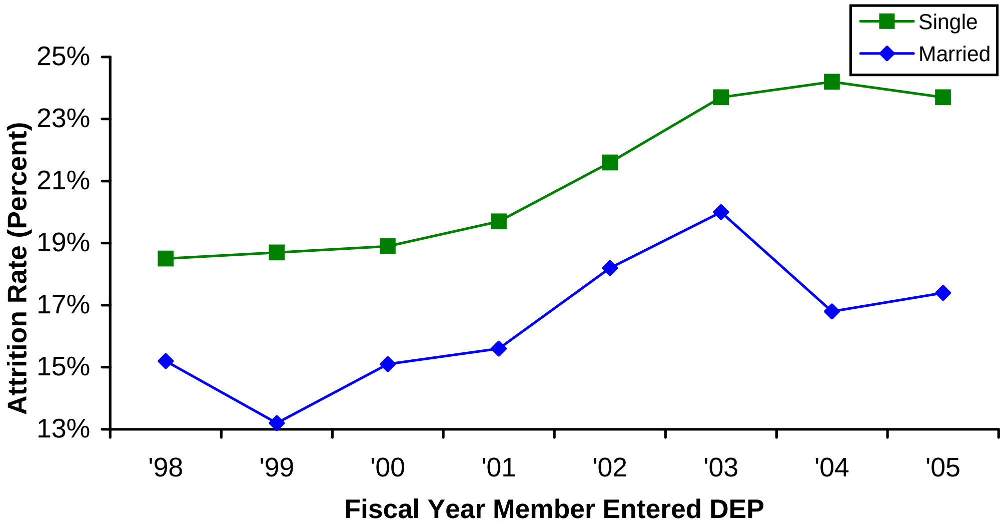
Table 8 shows the overall numbers of married and single members entering the Navy’s DEP. Single members overwhelmingly outnumbered the married members, with married members only accounting for 1.7 percent of total DEP accessions over the period of this study. Women were more likely to be married than men by 0.6 percentage points.

Table 8. Single and Married DEP Members by Gender

	Single		Married		Total	
	Number	Percent	Number	Percent	Number	Percent
Men	364,793	98.4	6,075	1.6	370,868	80.8
Women	86,472	97.8	1,933	2.2	88,405	19.2
Total	451,265	98.3	8,008	1.7	459,273	100

Source: Derived from PRIDE data files (CNRC, 2007).

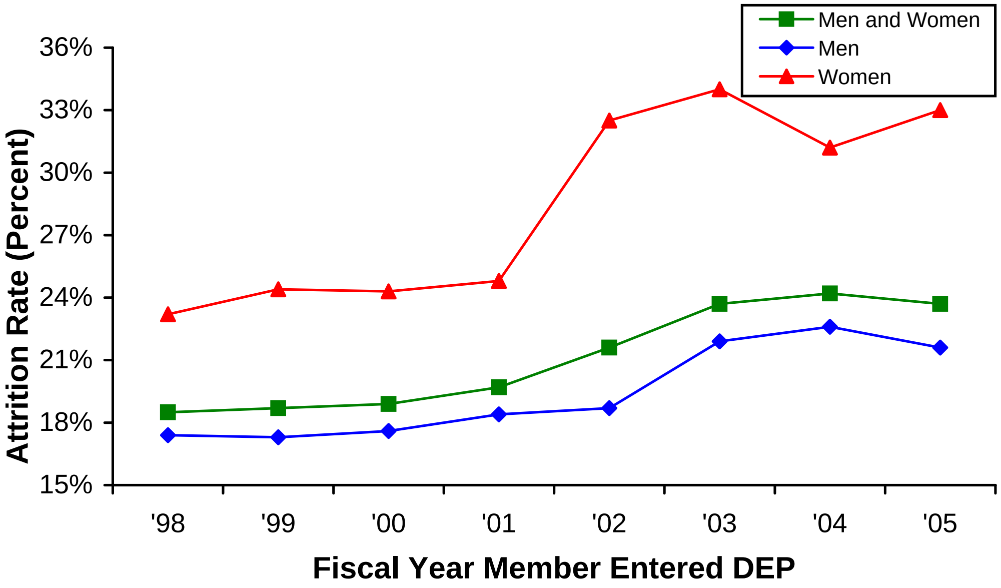
Since there were so few married members, the overall trends for single members, as seen in Figure 47, closely resemble the trends for all members, as seen in Figure 10. Married DEP members have lower attrition rates than do single members, averaging five percentage points lower over the course of the study. Between FY1998 and FY2003, the difference in rates varied between 3.3 and 5.5 points. In FY2004, the gap jumped to 7.5 points, and then narrowed to 6.3 points in FY2005.



Source: Derived from PRIDE data files (CNRC, 2007).

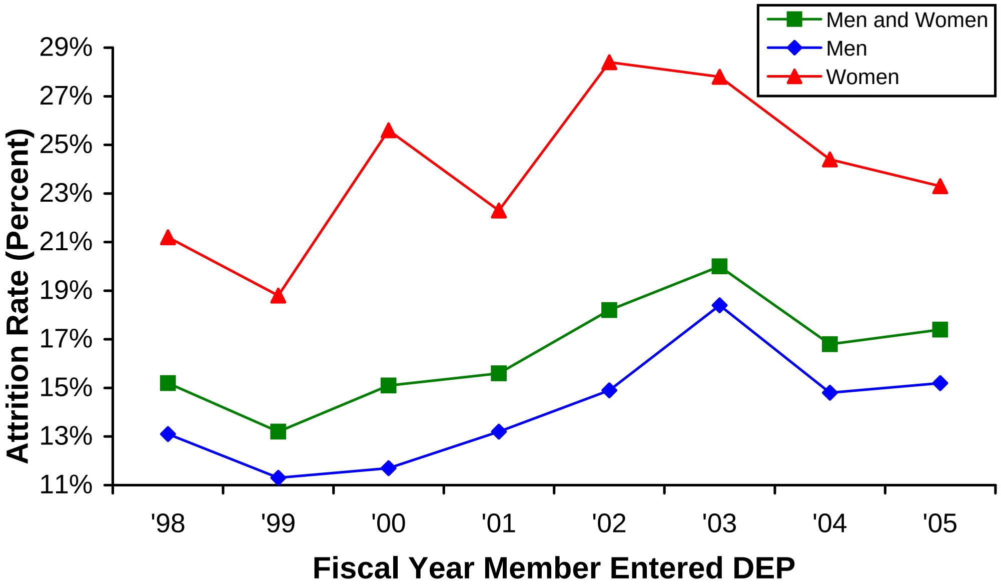
Figure 47. Attrition Rates of DEP Members by Marital Status and Year of Entry, Fiscal Years 1998-2005

Attrition rates for single men and women in Figure 48 are nearly identical to overall attrition rates for men and women in Figure 45 due to the vast majority of DEP members being single. Figure 49 shows that, for married women, attrition rates had more year-to-year variability than for single women. Rates for married women reached a maximum in FY2002, and then dropped every year through FY2005. Attrition rates for married men showed less year-to-year variation than for married women, and rates were lower than for single men. The trend for married men generally followed the overall trend of increasing rates through FY2003 and declining rates through FY2005.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 48. Attrition Rates for DEP Members who were Single by Gender and Year of Entry, Fiscal Years 1998-2005

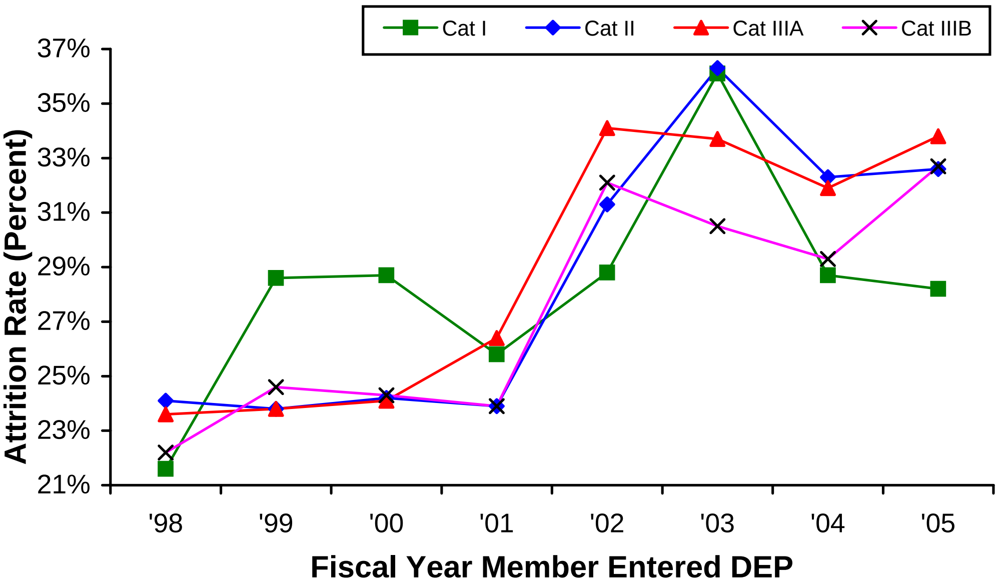


Source: Derived from PRIDE data files (CNRC, 2007).

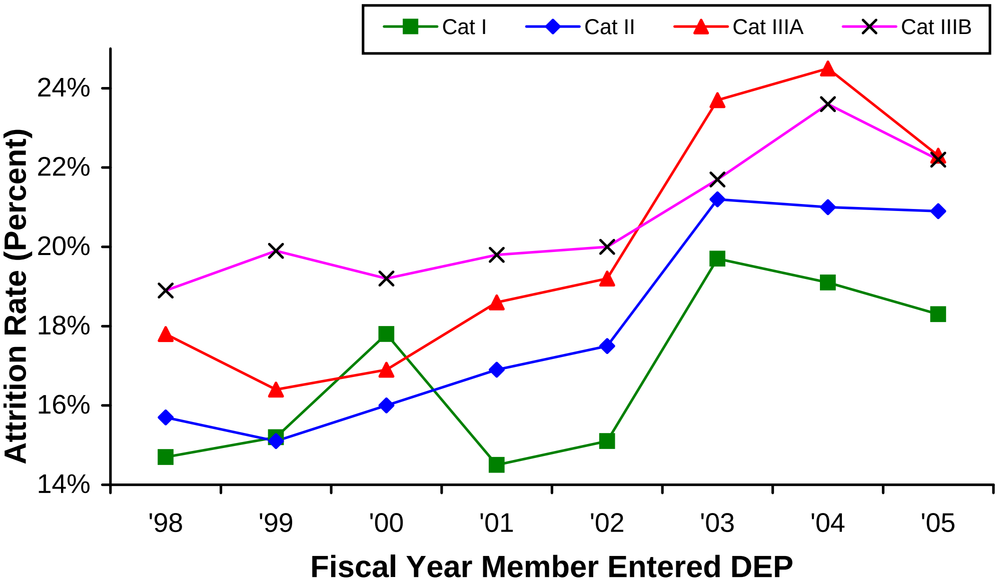
Figure 49. Attrition Rates for DEP Members who were Married by Gender and Year of Entry, Fiscal Years 1998-2005

DEP attrition trends for women based on AFQT category show widely varying trends. Figure 50 shows that women in AFQT Category I had the lowest attrition rate in FY1998 (21.6 percent). In FY1999 and FY2000, attrition rates for AFQT Category I women rose dramatically to nearly 29 percent, the highest rates of any AFQT category. In FY2002, Category I women again had the lowest rate (but still 29 percent), increasing dramatically to the highest point (over 36 percent) by FY2003, then declining again in the next two years. The other categories showed nearly as much year-to-year variation as Category I women.

Attrition rates for men based on AFQT categories did not show as much variation as that of women. Figure 50 shows that, between FY1998 and FY2002 attrition rates generally followed AFQT category. Category I men were at the low end and Category IIIB men were at the high end. In FY2003, Category IIIA men overtook IIIB men for the highest attrition rates. By FY2005, IIIA men remained with the highest rates, but only by 0.1 percentage points.



— Women —



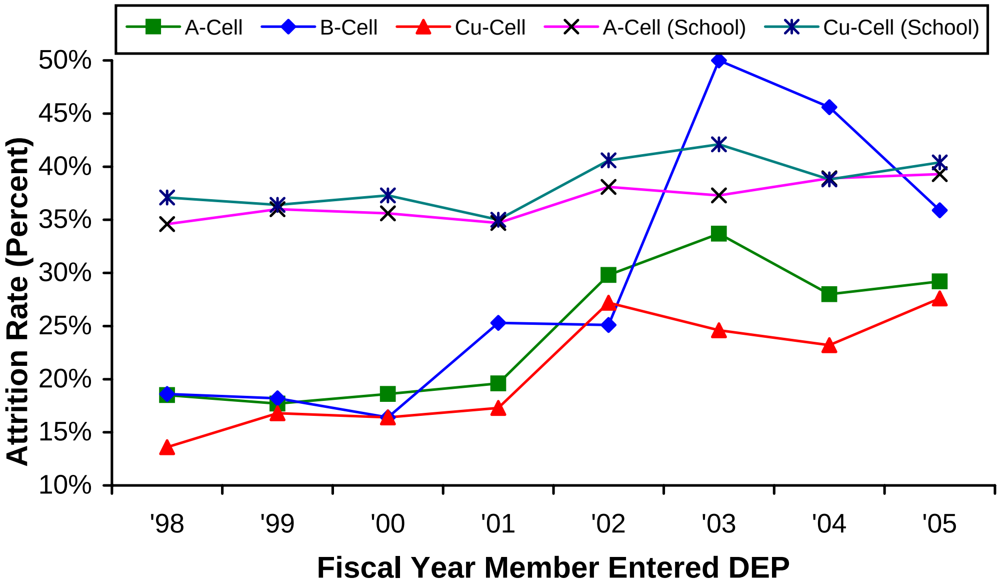
— Men —

Source: Derived from PRIDE data files (CNRC, 2007).

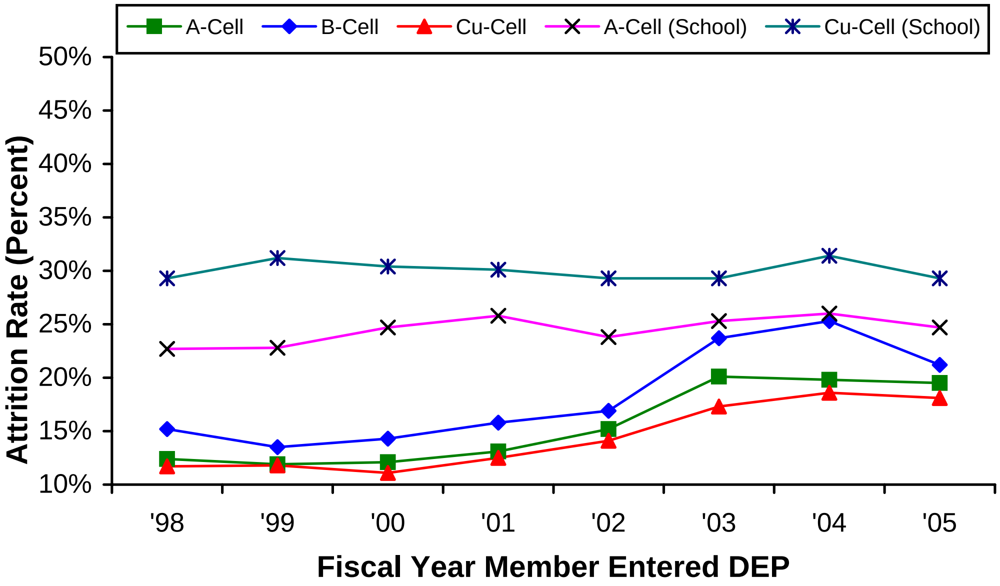
Figure 50. Attrition Rates of DEP Members by AFQT Category and Year of Entry, Fiscal Years 1998-2005

Men and women showed considerably different attrition trends among the Recruit Quality Matrix cells. For women, Figure 51 shows that A and Cu-Cell members had similar trends. Attrition rates climbed in the later years as time in DEP increased. Attrition rates for B-Cell women also increased in the later years, but showed a significant 25-point jump between FY2002 and FY2003. A and Cu-Cell women still in school showed remarkably similar attrition trends with Cu-Cell women, averaging only 1.2 percentage points higher over the entire period of the study.

Attrition rates for men were more distinctly separated by Recruit Quality Matrix cell. Cu-Cell men had the lowest attrition rates followed closely by A-Cell men. B-Cell men had the next lowest rates but increased at a greater rate in FY2003 and FY2004. Attrition rates for A and C-Cell men in school showed little variation over time, with Cu-Cell men averaging 5.5 percentage points higher than A-Cell men.



— Women —

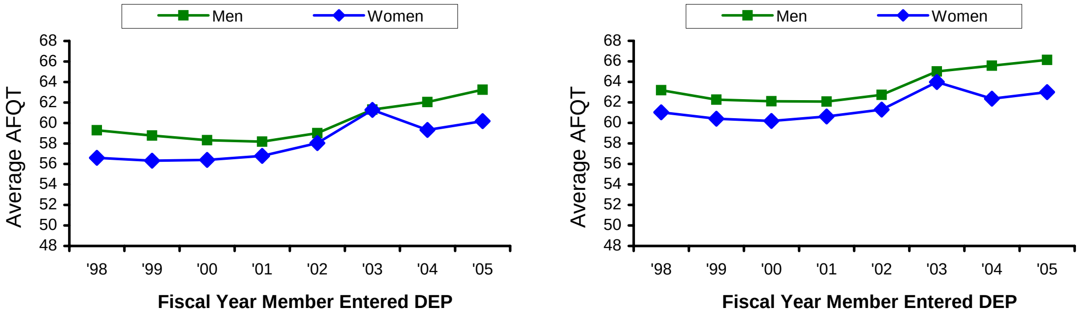


— Men —

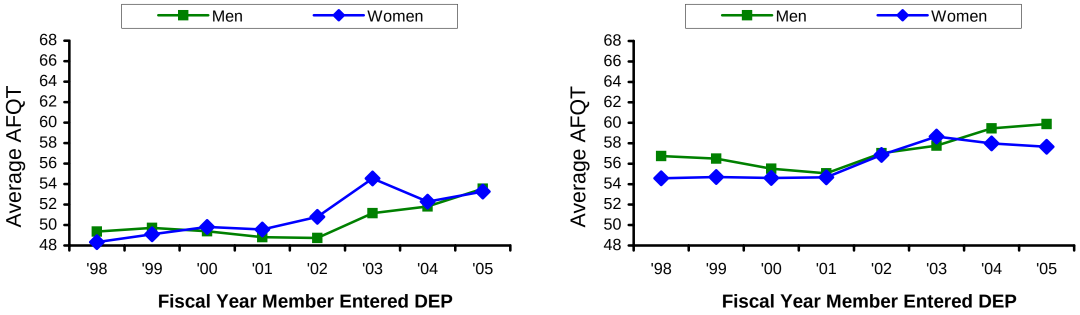
Source: Derived from PRIDE data files (CNRC, 2007).

Figure 51. Attrition Rates of DEP Members by Gender, Recruit Quality Matrix Cell (Members in School Separated) and Year of Entry, Fiscal Years 1998-2005

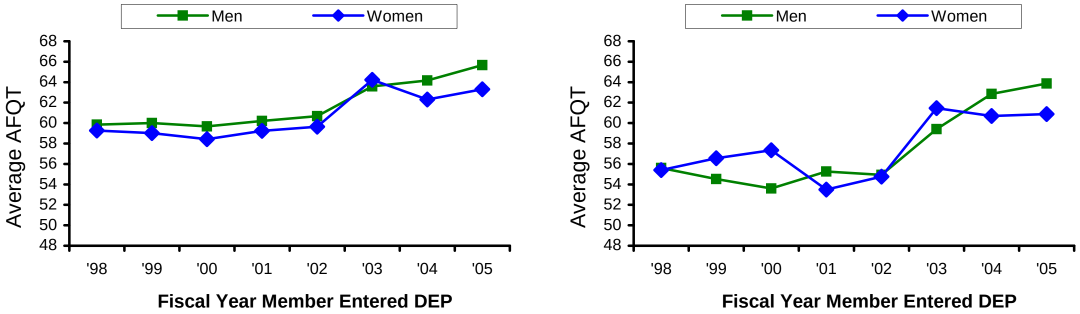
Figure 52 shows average AFQT scores of men and women by race and fiscal year. The general trends show men earn higher AFQT scores than women and scores have steadily been increasing.



— Overall— — White —



— Black — — Hispanic —



— API/NatAm — — Other—

Source: Derived from PRIDE data files (CNRC, 2007).

Figure 52. Average AFQT of DEP Members by Gender, Racial/Ethnic Group, and Year of Entry, Fiscal Years 1998-2005

6. DEP Attrition Analysis of Women by Rating

When applicants enlist in the Navy, they have the opportunity to discuss rating options on the day they join with a career guidance specialist, or classifier, at the Navy Recruit Processing Station. Ratings are offered to applicants based on aptitude (ASVAB scores), gender, physical qualifications, applicants’ interests, needs of the Navy, and several other factors. Each rating requires specific qualifications and has specific requirements to keep the fleet fully manned. If DEP members are not satisfied with their current rating or program, they can request a new rating or program and, if the new job is available, they will be reclassified into the new rating.

A study by Pass, Abrahams, Cole, and Edwards in 1996 for the Navy Personnel Research and Development Center identified 28 ratings as “traditional” ratings for women based on occupation groups in which women were traditionally employed[108]. Table 9 presents a list of the traditional ratings for women using the current ratings structure and nomenclature.

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[108] John J. Pass, Norman M. Abrahams, Darlene R. Cole, and Jack Edwards, Development of Interest Scales to Identify Female Applicants for Nontraditional Navy Ratings, (San Diego, CA: Navy Personnel Research and Development Center, 1996).

Table 9. Traditional Ratings for Women

Rating Abbreviation	Rating Name
AC	Air Traffic Controller
AG	Aerographer's Mate
AZ	Aviation Maintenance Administrationman
CS	Culinary Specialist
CTI	Cryptologic Technician - Interpretive
CTR	Cryptologic Technician - Collection
HM	Hospital Corpsman
IS	Intelligence Specialist
IT	Information Systems Technician
MC	Mass Communication Specialist
MU	Musician
OS	Operations Specialist
PC	Postal Clerk
PS	Personnel Specialist
RP	Religious Programs Specialist
SH	Ship's Serviceman
SK	Storekeeper
YN	Yeoman

Source: Derived from John J. Pass, Norman M. Abrahams, Darlene R. Cole, and Jack Edwards, Development of Interest Scales to Identify Female Applicants for Nontraditional Navy Ratings, (San Diego, CA: Navy Personnel Research and Development Center, 1996), 3.

There was a wide range in the number of women classified into the various ratings. By far the greatest number of women joined the DEP as SN, AN, or HM. In fact, 38.4 percent of all women joined in these three ratings. The 55 remaining ratings comprised 61.6 percent of female DEP enlistments. By contrast, 38.2 percent of women entered DEP in traditional ratings (using the definitions in Table 9). Table 10 provides a complete listing of the number of women and percent of female DEP enlistments for all ratings. Table 67 in Appendix A shows a year-by-year listing of all DEP ratings.

Table 10. Number and Percent of Women by DEP Rating (Descending Frequency, Traditional Ratings Bold)

Rating	Number	Percent	Rating	Number	Percent
SN	12,478	14.1	EN	628	0.7
AN	11,405	12.9	EM	574	0.6
HM	**10,045**	**11.4**	IC	550	0.6
IT	**3,896**	**4.4**	AM	502	0.6
AECF	3,605	4.1	ABH	412	0.5
CS	**2,864**	**3.2**	**CTR**	**403**	**0.5**
AV	2,730	3.1	BU	398	0.5
YN	**2,554**	**2.9**	CTM	371	0.4
MA	2,476	2.8	AS	364	0.4
NF	2,474	2.8	PR	358	0.4
SK	**2,254**	**2.5**	**AG**	**343**	**0.4**
OS	**2,239**	**2.5**	ABE	316	0.4
AO	1,703	1.9	DC	291	0.3
PS	**1,629**	**1.8**	ABF	265	0.3
FN	1,602	1.8	GSM	257	0.3
CTI	**1,240**	**1.4**	HT	210	0.2
AC	**1,232**	**1.4**	EO	208	0.2
AIRC	1,063	1.2	**RP**	**169**	**0.2**
CTT	1,030	1.2	CE	166	0.2
AD	949	1.1	AME	146	0.2
SH	**924**	**1.0**	UT	143	0.2
AIRR	875	1.0	**PC**	**137**	**0.2**
QM	812	0.9	CM	136	0.2
AZ	**803**	**0.9**	GSE	133	0.2
GM	788	0.9	**MU**	**116**	**0.1**
IS	**786**	**0.9**	SW	97	0.1
STG	777	0.9	EA	69	0.1
MM	741	0.8	MN	65	0.1
MC	**702**	**0.8**	MR	38	0.0

Source: Derived from PRIDE data files (CNRC, 2007).

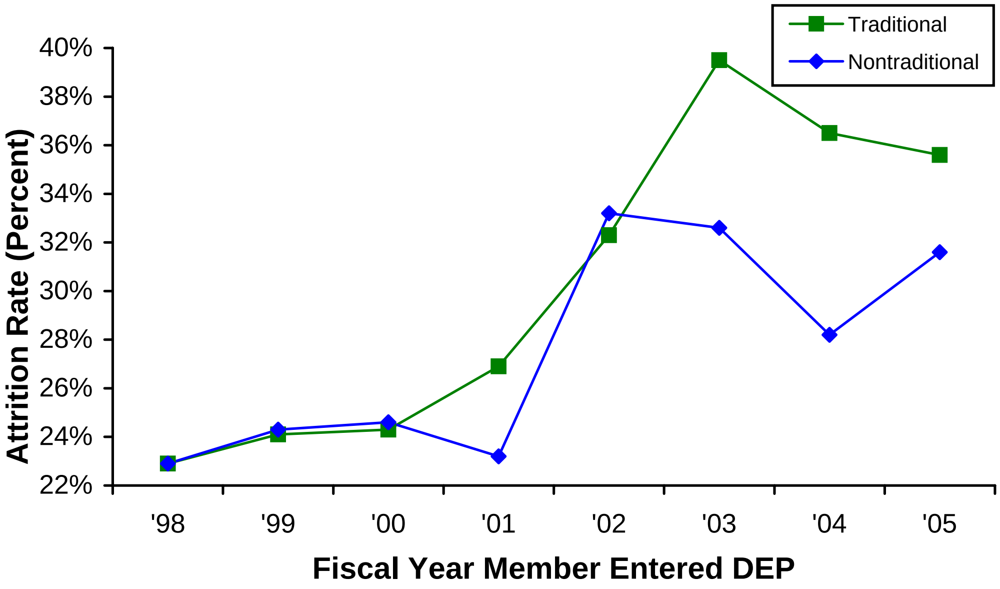
DEP attrition rates varied widely between the ratings. Women in the GSM rating had the highest attrition rate, nearly 39 percent, over the entire period of the study, while those in the MU rating had the lowest attrition rate, only 9.5 percent. Attrition rates for women in traditional ratings averaged 29.3 percent, while those in nontraditional ratings had an average attrition rate slightly lower, at 27.3 percent. Table 11 shows attrition rates for all ratings. Table 68 in Appendix A shows a year-by-year listing of attrition rates.

Table 11. DEP Attrition Rates of Women by DEP Rating
(Descending Order, Traditional Ratings Bold)

Rating	Percent	Rating	Percent
GSM	38.9	**AG**	**29.2**
EO	38.0	**CS**	**29.1**
UT	37.8	EA	29.0
CTR	**36.5**	AIRR	28.9
SW	35.1	**YN**	**28.8**
ABH	33.7	AIRC	28.8
PC	**33.6**	**SK**	**28.4**
GM	33.4	SN	28.4
AO	33.0	IC	28.4
SH	**32.9**	STG	28.3
AZ	**32.8**	EN	27.4
MN	32.3	AD	27.3
ABF	32.1	MM	27.3
HM	**31.9**	CM	27.2
CE	31.9	**RP**	**26.6**
BU	31.9	NF	26.4
MA	31.7	MR	26.3
ABE	31.6	**IT**	**25.9**
HT	31.4	**IS**	**25.8**
QM	30.8	AME	25.3
AS	30.8	CTM	25.1
EM	30.5	AM	24.9
OS	**30.4**	AECF	24.6
PS	**30.0**	FN	24.4
AC	**30.0**	AN	22.8
MC	**29.9**	GSE	22.6
PR	29.6	DC	22.0
AV	29.3	**CTI**	**15.3**
CTT	29.2	**MU**	**9.5**

Source: Derived from PRIDE data files (CNRC, 2007).

Between FY1998 and FY2000, attrition rates for women in traditional and nontraditional ratings were nearly equal. As seen in Figure 53, attrition rates for women in traditional ratings began climbing in FY2001 and peaked in FY2003 at nearly 40 percent. Attrition rates for women in nontraditional ratings jumped 10 percentage points between FY2001 and FY2002, when rates reached a maximum of 33.2 percent.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 53. Attrition Rates for Women in DEP by Job Type (Traditional and Nontraditional) and Year of Entry, Fiscal Years 1998-2005

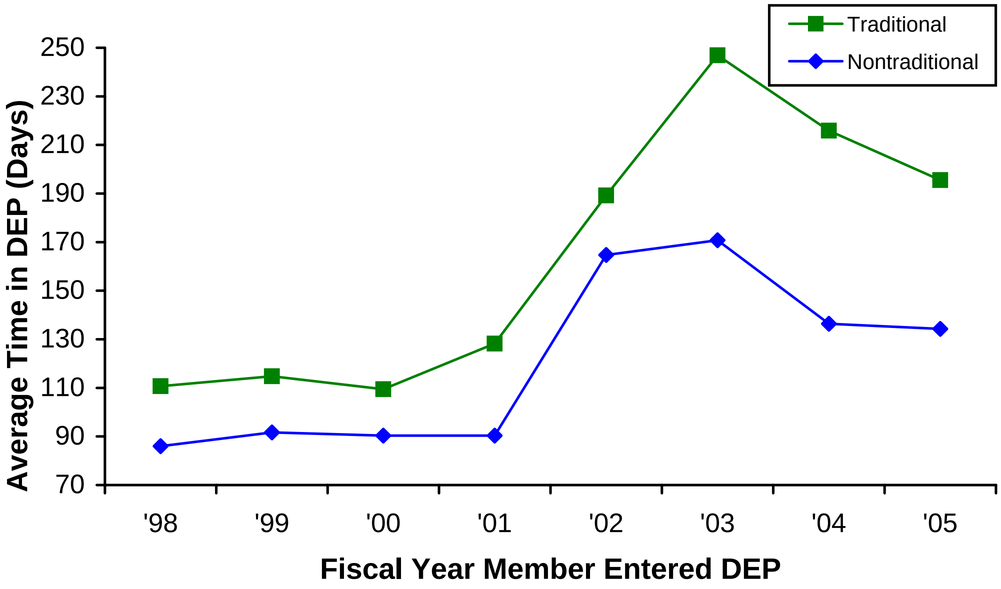
Average time in DEP varied widely among the different ratings. Table 12 provides average DEP times for women in all ratings. The CTR rating showed the longest average time in DEP, over 244 days. The FN apprenticeship program, disestablished in FY2004, had the shortest average time in DEP, at only 80.8 days. Time in DEP for traditional ratings averaged over 155 days, while nontraditional ratings averaged just over 118 days. Table 69 in Appendix A shows a year-by-year listing of DEP times for all DEP ratings.

Table 12. Average Time in DEP (Days) of Women Accessed into Each DEP Rating (Descending Order, Traditional Ratings Bold)

Rating	Time in DEP (Days)	Rating	Time in DEP (Days)
CTR	**244.3**	UT	128.6
HM	**192.6**	ABF	127.1
OS	**167.8**	**RP**	**126.8**
AG	**162.9**	CM	126.3
AC	**160.1**	BU	126.2
CTT	159.4	HT	126.2
CE	156.7	AS	124.2
IS	**156.2**	PR	123.4
NF	154.9	IC	122.6
QM	154.9	DC	120.9
PS	**153.8**	**CS**	**120.9**
GM	153.2	MR	118.6
AIRC	150.1	GSM	117.0
ABH	149.9	AM	116.7
MC	**147.0**	EM	116.5
AIRR	146.2	GSE	116.2
MA	144.2	AME	113.3
AD	143.1	SN	113.0
SW	140.9	STG	112.5
YN	**140.2**	MN	111.1
AZ	**138.2**	**SK**	**110.3**
IT	**136.0**	**CTI**	**109.5**
SH	**135.5**	AECF	102.6
ABE	135.1	EN	99.1
AV	135.0	AN	97.3
EA	133.8	**MU**	**94.8**
CTM	132.3	MM	90.1
EO	131.5	**PC**	**87.3**
AO	131.1	FN	80.8

Source: Derived from PRIDE data files (CNRC, 2007).

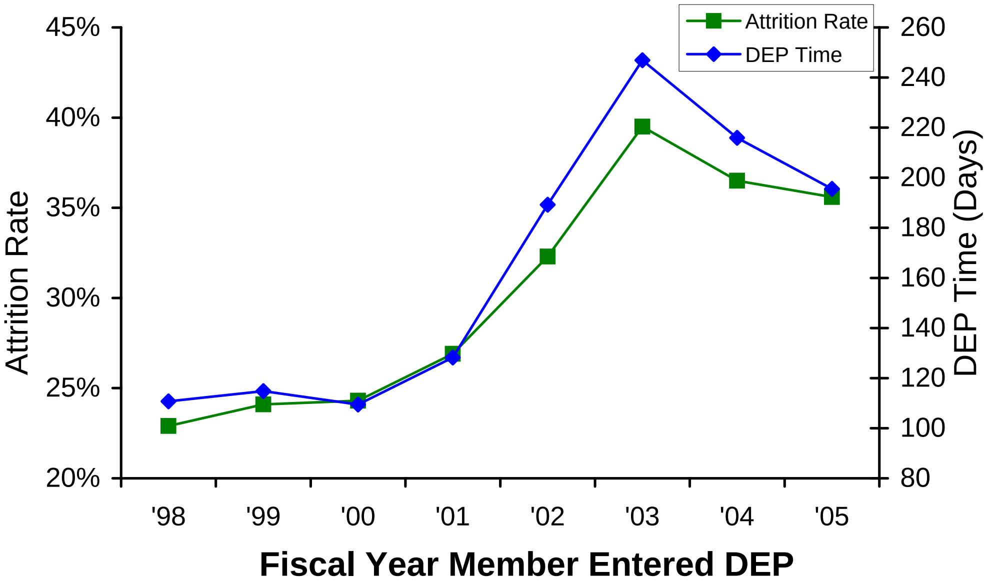
Average time in DEP for traditional and nontraditional ratings is shown in Figure 54. Between FY1998 and FY2002, the average difference in DEP times between the two job groups was just under 26 days. Between FY2003 and FY2005, the average difference increased to over 72 days. For women in traditional jobs, time in DEP increased by over 137 days between FY2000 and FY2003. Over the same time frame, average DEP time increased by only 80 days for women in nontraditional ratings.



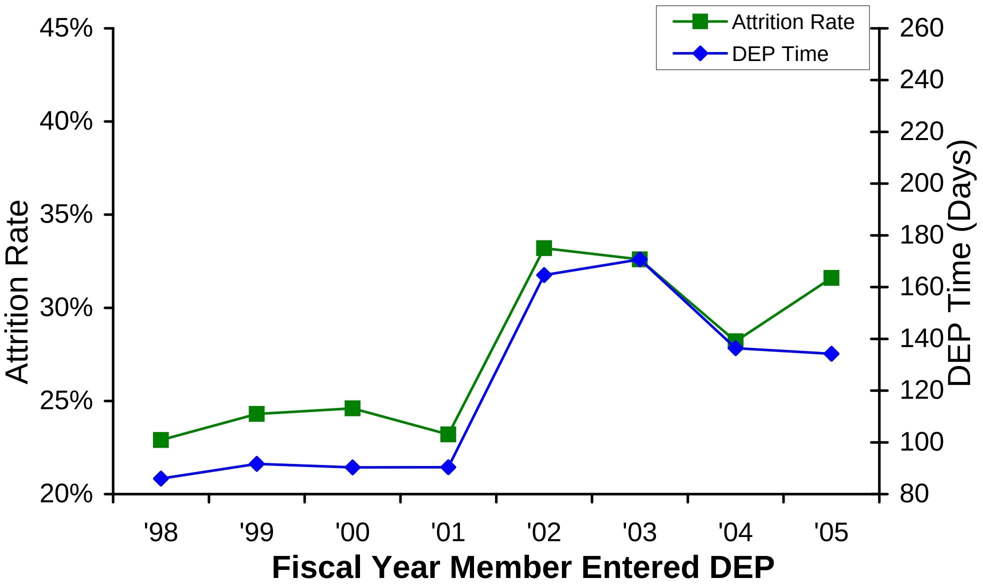
Source: Derived from PRIDE data files (CNRC, 2007).

Figure 54. Average Time in DEP for Women by Job Type (Traditional and Nontraditional) and Year of Entry, Fiscal Years 1998-2005

Attrition rates for both traditional and nontraditional ratings are strongly correlated to time spent in DEP. Figure 55 compares attrition rates and DEP times for the two ratings groups. For each group, as average time in DEP changes, a corresponding change in attrition rate occurs. Traditional ratings tend to have longer average DEP times and thus higher attrition rates.



— Traditional —

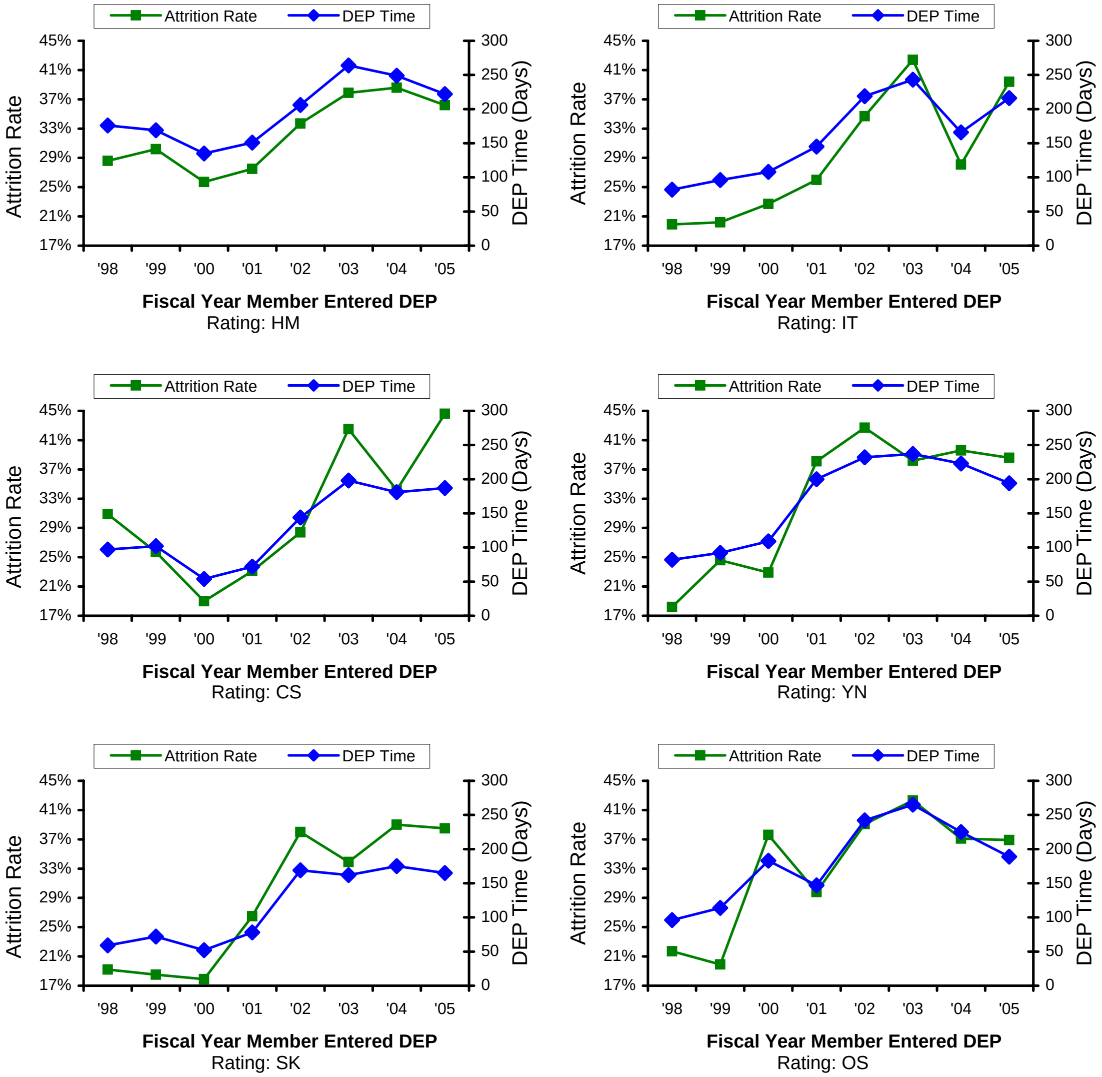


— Nontraditional —

Source: Derived from PRIDE data files (CNRC, 2007).

Figure 55. Attrition Rate and Average DEP Time for Women by Job Type (Traditional and Nontraditional) and Year of Entry, Fiscal Years 1998-2005

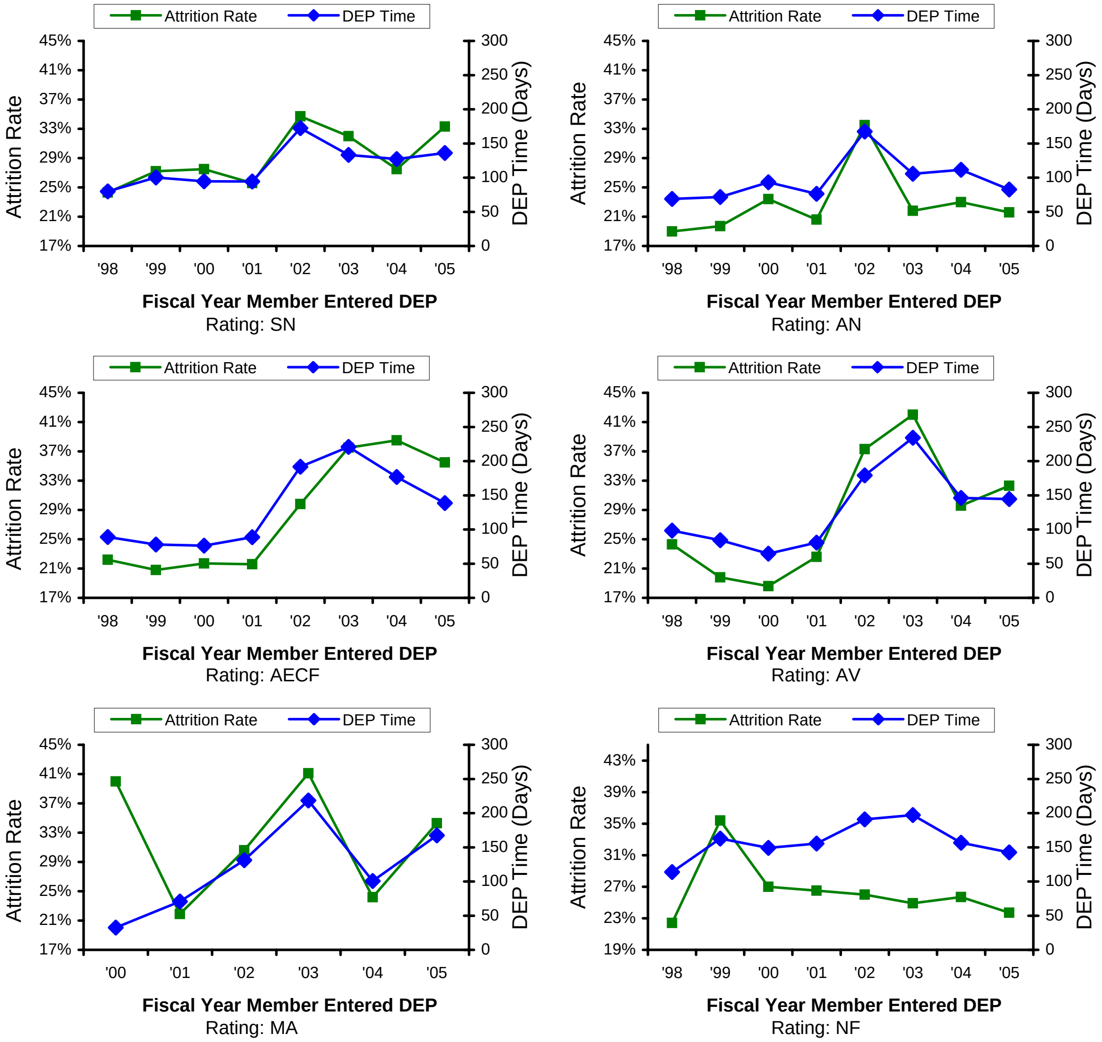
As was the case for overall attrition trends, attrition rates for women in specific DEP ratings are correlated with time in DEP. The trends for the six traditional ratings with the largest DEP populations (HM, IT, CS, YN, SK, and OS) are shown in Figure 56. Each rating contained more than 2,200 women. Attrition trends for each rating closely followed average time in DEP.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 56. Attrition Rate and Average DEP Time for Women by Selected Traditional Rating and Year of Entry, Fiscal Years 1998-2005

The trends for the six nontraditional ratings with the largest DEP populations (SN, AN, AECF, AV, MA, and NF) are shown in Figure 59. Each rating contained more than 2,400 women. Attrition trends for five of the six ratings closely followed average time in DEP. Women in the Nuclear Field showed a declining attrition trend as DEP times increased, which could be related to the program's stringent qualification requirements.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 57. Attrition Rate and Average DEP Time for Women by Selected Nontraditional Rating and Year of Entry, Fiscal Years 1998-2005

7. Regression Analysis of DEP Attrition

Using Maximum Likelihood Estimation (MLE), probit models were used to further analyze the relationships and test for statistical significance. Based on the trend analyses described previously, variables were identified that could have a significant effect on attrition. Other control variables were added to improve the probit maximum likelihood estimation model specification. These variables include: age, gender, marital status, race/ethnicity, entry pay grade, time in DEP, enlistment bonus, unemployment rate, reclassification of rating, fiscal year of DEP, and NRD. See Appendix B, Table 70 for a complete listing of variables. These variables were then used in specifying the separate models. Seven models were constructed based on the previous analyses. The general specification for the full version of models one through six is as follows:

dep_atr = B0 + B1(unemp_rate) + B2(reclass) + B3(enl_bonus) + B4(age_17) + B5(age_19) + B6(age_20) + B7(age_21) + B8(age_22) + B9(age_23p) + B10(married_fem) + B11(single_fem) + B12(married_mal) + B13(blk_only) + B14(hsp_only) + B15(api_only) + B16(multi) + B17(days_dep) + B18(days_dep_sq) + B19(afqt) + B20(SG) + B21(fiveYO) + B22(AEF) + B23(ATF) + B24(NF) +B25(TEP) + B26(twoYO) + B27(threeYO) + B28(NCSA) + B29(NPSB) + B30(E2) +B31(E3) + B32(FY1999) + B33(FY2000) + B34(FY2001) + B35(FY2002) + B36(FY2003) + B37(FY2004) + B38(FY2005) + B39 through B63 (NRDs) +

.

The first model analyzes AFQT categories. The second model analyzes the education Tier groups. The third model analyzes the education Tier groups with Tier I DEP members in school separated into their own group. The fourth model analyzes the current Recruit Quality Matrix cell structure. The fifth model analyzes the Recruit Quality matrix with DEP members in school separated into their own cells. The sixth model analyzes the individual education credential categories. This model is also used to analyze the enlistment programs. The seventh model analyzes DEP attrition for a sample of women and assesses the effect of their enlistment ratings.

In models one through six, the base group for the full model is a single, white, 18-year old male, entering as an E1 with no enlistment bonus as a GENDET Airman in FY1998 from NRD Atlanta. The base group also had an average 59 AFQT score and was in DEP 120 days. Model seven is similar to models one through six, but only women are analyzed.

Prior to performing the full regression on each model, a preliminary regression was conducted using only the specific focus variables, to determine the predicting power of the primary variables in a simple model as compared to in the fully specified models.

a. Regression Analysis of AFQT Categories

The preliminary regression on AFQT categories used Category II for the base group. The effects of each AFQT category on DEP attrition were statistically significant at the 1-percent level or better. Table 13 shows Category I DEP members were predicted to have a lower likelihood of discharge from DEP, and Categories IIIA and IIIB members have a greater likelihood of discharge. Based on partial effects of the regression, being an AFQT Category I DEP member results in a 1.53 percentage point lower probability of attrition (compared to Category II), holding all other variables constant. These results support the previous trend analysis.

Table 13. Preliminary DEP Attrition Regression, AFQT Categories

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
cat1	-0.0544	0.0104	-5.24	0.000***	-0.0153	0.049
cat3a	0.0657	0.0054	12.18	0.000***	0.0191	0.270
cat3b	0.0644	0.0051	12.70	0.000***	0.0186	0.343
_cons	-0.8483	0.0036	-233.55	0.000***		

Probit regression. Dependent variable is "attrited in DEP"

*** Indicates coefficient is significant at 1-percent level or better

AFQT Category II is omitted category

Number of obs = 459,273 Pseudo R^2 = 0.0006

Source: Derived from PRIDE data files (CNRC, 2007).

The results of the full regression model are available in Table 71, Appendix C. The results for the control variables were generally as expected, with a few exceptions. With all other factors held constant, the variables that resulted in greater attrition rates were: being reclassified to a new job while in DEP, being 17 years old, being a single or married woman, being in DEP for a longer time, being in the SG, 5YO, or AEF programs, and each fiscal year past FY1998. The variables that resulted in lower attrition rates were: higher unemployment rates, receiving an enlistment bonus, being 19 to 21 years old, being a married man, being an API/NatAm, enlisting as an E2 or E3, enlisting in the ATF, NF, GTEP, TEP, or programs, and enlisting in most NRDs other than Atlanta.

Additionally, when all demographic variables are included, the estimates of the primary independent variables (AFQT categories) showed the same signs and significances as they did in the preliminary regression. All three AFQT Categories predicted a higher attrition rate compared to Category II. Table 14 shows the results for the primary variables from the full regression. Interpreting Table 14, based on partial effects of the regression, being an AFQT Category I DEP member results in a 1.25 percentage point difference in the probability of attrition, holding all other variables constant, compared to a Category II DEP member. The pseudo R-squared statistic of the full regression was 0.0370 compared to 0.0006 for the preliminary regression, suggesting that many other factors besides AFQT category influence the probability of DEP attrition.

The pseudo R-squared value that Stata calculates is the McFadden's pseudo R-squared. Probit regression does not have an equivalent to the R-squared that is found in ordinary least squares (OLS) regression. Because this statistic does not mean what R-square means in OLS regression (the proportion of variance of the dependent variable explained by the independent variables), one should not directly interpret this statistic, only the change in the statistic.

Table 14. Full DEP Attrition Regression Results, AFQT Categories

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
cat1	0.0438	0.0112	3.89	0.000***	0.0125	0.049
cat3a	0.0359	0.0059	6.12	0.000***	0.0101	0.270
cat3b	0.0528	0.0062	8.56	0.000***	0.0149	0.343

Probit regression. Dependent variable is "attrited in DEP"
*** Indicates coefficient is significant at 1-percent level or better
AFQT Category II is omitted category
Number of obs = 459,273 Pseudo R^2 = 0.0370
Source: Derived from PRIDE data files (CNRC, 2007).

b. Regression Analysis of Education Tier Groups

The preliminary regression on education Tier groups used Tier I members for the base group. The effects of both Tier II and Tier III members on DEP attrition were statistically significant at the 1-percent level. Table 15 shows both Tier II and Tier III DEP members were predicted to have a lower likelihood of discharge from DEP than Tier I DEP members. These results were similar to the previous trend analysis.

Table 15. Preliminary DEP Attrition Regression, Education Tier Groups

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
tier2	-0.1267	0.0105	-12.09	0.000***	-0.0346	0.045
tier3	-0.1380	0.0129	-10.67	0.000***	-0.0375	0.029
_cons	-0.8014	0.0022	-370.35	0.000***		

Probit regression. Dependent variable is "attrited in DEP"
*** Indicates coefficient is significant at 1-percent level or better
Tier I is omitted category
Number of obs = 459,273 Pseudo R^2 = 0.0005
Source: Derived from PRIDE data files (CNRC, 2007).

The results of the full regression are available in Table 72, Appendix C. The results for the control variables were similar to the previous full regression. The predicted probabilities of attrition for the 5YO and AEF programs are no longer significantly different than the GENDET program, and the NCSA program now predicts lower attrition. Additionally, the AFQT variable was added to this regression, and predicts lower attrition as AFQT increases.

The estimates of the primary independent variables (education Tier groups) in the full model differed slightly from the preliminary regression. The Tier II variable is now only significant at the 10-percent level. Both Tier II and Tier III showed lower attrition than Tier I. Table 16 shows the regression results for the primary variables. Based on partial effects of the regression, being a Tier II DEP member resulted in a 0.51 percentage point lower probability of attrition, and Tier III had a 1.58 point lower attrition probability. Pseudo R-squared for this model was 0.0369, which was slightly lower than the statistic for the previous full regression, 0.0370.

Table 16. Final DEP Attrition Regression Results, Education Tier Groups

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
tier2	-0.0182	0.0108	-1.69	0.092*	-0.0051	0.045
tier3	-0.0577	0.0135	-4.28	0.000***	-0.0158	0.029

Probit regression. Dependent variable is "attrited in DEP"
** Indicates coefficient is significant at 5-percent level or better
*** Indicates coefficient is significant at 1-percent level or better
Tier I is omitted category
Number of obs = 459,273 Pseudo R^2 = 0.0369
Source: Derived from PRIDE data files (CNRC, 2007).

c. Regression Analysis of Education Tier Groups with DEP Members in School Separated

The preliminary regression on education Tier with DEP members in school used Tier I members who were no longer in school as the base group. The effects of both Tier I in school, and Tier II members on DEP attrition were statistically significant at the 1-percent level. Tier III was significant at the 5-percent level. Table 17 shows all three groups had higher probabilities of attrition, with Tier I in school predicting a 12.1 percentage point difference from Tier I DEP members not in school.

Table 17. Preliminary DEP Attrition Regression, Education Tier Groups with DEP Members in School Separated

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
tier1_school	0.4068	0.0044	92.18	0.000***	0.1210	0.345
tier2	0.0401	0.0107	3.76	0.000***	0.0115	0.045
tier3	0.0288	0.0131	2.20	0.028**	0.0083	0.029
_cons	-0.9682	0.0029	-335.25	0.000***		

Probit regression. Dependent variable is "attrited in DEP"
** Indicates coefficient is significant at 5-percent level or better
*** Indicates coefficient is significant at 1-percent level or better
Tier I DEP members not in school is omitted category
Number of obs = 459,273 Pseudo R^2 = 0.0186
Source: Derived from PRIDE data files (CNRC, 2007).

The results of the full regression model are available in Table 73, Appendix C. The results for the control variables were different, compared to the previous full regression. The reclass and AFQT variables are no longer significant, and being 17-years old predicts lower attrition. DEP members 19-years and older are predicted to have higher attrition.

In the full regression model, the estimates of the primary independent variables (education Tier groups with Tier I DEP members in school separated) differed only slightly from the preliminary regression. Table 18 shows the regression results for the primary variables. All three groups are now significant at the 1-percent level, and show positive effects on attrition compared to Tier I DEP members not in school. Based on partial effects of the regression, Tier I members in school had a large partial effect, with an 11.8 point difference in the probability of discharge from DEP as compared to out-of-school Tier I DEP members. Being a Tier II DEP member resulted in a 2.08 point difference in the probability of attrition, and Tier III members showed a 1.24 point higher probability. The pseudo R-squared value was much higher than in the Tier Group model without members in school separated, 0.0458 versus 0.0369, indicating that this model has greater predicting power.

Table 18. Final DEP Attrition Regression Results, Education Tier Groups with DEP Members in School Separated

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
tier1_school	0.4025	0.0063	64.36	0.000***	0.1175	0.345
tier2	0.0728	0.0109	6.68	0.000***	0.0208	0.045
tier3	0.0439	0.0136	3.23	0.001***	0.0124	0.029

Probit regression. Dependent variable is "attrited in DEP"
*** Indicates coefficient is significant at 1-percent level or better
Tier I DEP members not in school is omitted category
Number of obs = 459,273 Pseudo R^2 = 0.0458
Source: Derived from PRIDE data files (CNRC, 2007).

d. Regression Analysis of Recruit Quality Matrix Cells

The preliminary regression on Recruit Quality Matrix Cells used A-Cell members for the base group. The effects of each cell on DEP attrition were statistically significant at the 1-percent level or better. Table 19 shows B-Cell DEP members were predicted to have a lower likelihood of discharge from DEP than A-Cell members, and Cu-Cell members have a greater likelihood of discharge, though the effect was small. These results support the previous trend analysis.

Table 19. Preliminary DEP Attrition Regression, Recruit Quality Matrix Cells

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
B_Cell	-0.1172	0.0086	-13.66	0.000***	-0.0323	0.071
Cu_Cell	0.0305	0.0045	6.82	0.000***	0.0088	0.340
_cons	-0.8132	0.0027	-298.54	0.000***		

Probit regression. Dependent variable is "attrited in DEP"
*** Indicates coefficient is significant at 1-percent level or better
A-Cell is omitted category
Number of obs = 459,273 Pseudo R^2 = 0.0006
Source: Derived from PRIDE data files (CNRC, 2007).

The results from the full regression model are available in Table 74, Appendix C. The control variables showed the same effects and significance levels as they showed in the education Tier group model.

Table 20 shows the estimates of the primary independent variables (Recruit Quality Matrix Cells) differed slightly from the preliminary regression. Being a B-Cell DEP member still predicted a lower attrition rate, but the partial effects decreased from 3.23 points in the preliminary regression to 0.70 of a point. The Cu-Cell variable still showed positive effects, but the partial effects decreased from 0.80 to 0.63 of a point. The pseudo R-squared value was the same as the Tier Group model without members in school separated, 0.0369, indicating that this model does not have greater predicting power compared with education Tiers.

Table 20. Final DEP Attrition Regression Results, Recruit Quality Matrix Cells

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**		**Partial Effects**	**Mean**
B_Cell	-0.0252	0.0091	-2.78	0.005	***	-0.0070	0.071
Cu_Cell	0.0223	0.0054	4.14	0.000	***	0.0063	0.340

Probit regression. Dependent variable is "attrited in DEP"

*** Indicates coefficient is significant at 1-percent level or better

A-Cell is omitted category

Number of obs = 459,273 Pseudo R^2 = 0.0369

Source: Derived from PRIDE data files (CNRC, 2007).

e. Regression Analysis of Recruit Quality Matrix Cells with DEP Members in School Separated

The preliminary regression on Recruit Quality Matrix Cells, with DEP members in school separated, used A-Cell DEP members not in school for the base group. The effects of all but B-Cell members on DEP attrition were statistically significant at the 1-percent level or better. Table 21 shows B-Cell DEP members were not statistically different than A-Cell members not in school, with respect to attrition. Cu-Cell members not in school were predicted to have a lower likelihood of discharge from DEP, and A and Cu-Cell members in school both have a greater likelihood of discharge. These results were similar to the previous trend analysis, except the outcome of the B-Cell variable. The trend analysis showed that B-Cell members had higher attrition rates than did A-Cell members. The pseudo R-squared of this preliminary regression was 0.0199, which was much greater than the pseudo R-squared value from the previous preliminary regression (0.0006).

Table 21. Preliminary DEP Attrition Regression, Recruit Quality Matrix Cells with DEP Members in School Separated

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
B_Cell	0.0074	0.0089	0.84	0.402	0.0021	0.071
Cu_Cell_Grads	-0.0890	0.0061	-14.60	0.000***	-0.0247	0.206
A_Cell_School	0.3223	0.0056	57.67	0.000***	0.0981	0.210
Cu_Cell_School	0.4578	0.0063	72.24	0.000***	0.1463	0.135
_cons	-0.9378	0.0035	-264.95	0.000***		

Probit regression. Dependent variable is "attrited in DEP"
*** Indicates coefficient is significant at 1-percent level or better
A-Cell with DEP members not in school is omitted category
Number of obs = 459,273 Pseudo R^2 = 0.0199
Source: Derived from PRIDE data files (CNRC, 2007).

The results of the full regression are presented in Table 75, Appendix C. The results for the control variables were as expected based on the regression of education Tier categories with DEP members in school separated. Each control variable showed the same effect and significance on DEP attrition.

The estimates of the primary independent variables (Recruit Quality Matrix Cells with DEP Members in School Separated) differed from the preliminary regression; being a B-Cell DEP member now predicts a significantly higher attrition rate. Being in school had large positive effects on attrition, for both A and Cu-Cell DEP members. Table 22 shows the regression results for the primary variables. Based on partial effects of the regression, being a B-Cell DEP member resulted in a 1.09 percentage point higher probability of attrition than A-Cell DEP members not in school. Cu-Cell members not in school showed a 1.9 point lower probability, A-Cell members in school showed a 10.1 point higher probability, and Cu-Cell members in school showed a 13.24 point higher probability. The pseudo R-squared value for the full regression was 0.0464, reflecting the greater predicting power of separating A and Cu-Cell DEP members who were in school at the time they entered the DEP.

Table 22. Final DEP Attrition Regression Results, Recruit Quality Matrix Cells with DEP Members in School Separated

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
B_Cell	0.0388	0.0093	4.18	0.000***	0.0109	0.071
Cu_Cell_Grad	-0.0708	0.0068	-10.36	0.000***	-0.0193	0.206
A_Cell_School	0.3365	0.0073	46.02	0.000***	0.1009	0.210
Cu_Cell_School	0.4243	0.0081	52.59	0.000***	0.1324	0.135

Probit regression. Dependent variable is "attrited in DEP"
*** Indicates coefficient is significant at 1-percent level or better
A-Cell with DEP members not in school is omitted category
Number of obs = 459,273   Pseudo R^2 = 0.0464
Source: Derived from PRIDE data files (CNRC, 2007).

f. Regression Analysis of Education Credential Categories

The preliminary regression on education credential categories uses high school graduates for the base group. High school seniors, members enrolled in adult education or 15 college credits, bachelor’s degree holders, master’s degree holders, GED holders, other non-high school diploma graduates, correspondence school graduates, and dropouts all showed positive effects on DEP attrition and were significant at the 10-percent level or better. Home school graduates and members with certificates of attendance showed negative effects and were significant at the 10-percent level or better. The results for members who failed a high school exit exam, adult high school graduates, GED holders with 15 college credits or Job Corps completion certificates, associate's degree holders, and NGYCP participants showed DEP attrition rates that were not statistically different than traditional high school graduates. Table 23 shows the preliminary regression results. Pseudo R-squared for this preliminary regression was 0.0209, which was greater than any previous preliminary regression, suggesting this is a better model specification.

Table 23. Preliminary DEP Attrition Regression, Education Credentials

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**		**Partial Effects**	**Mean**
mast_deg_I	0.1707	0.1014	1.68	0.092	*	0.0517	0.000
bach_deg_I	0.2033	0.0178	11.44	0.000	***	0.0622	0.014
assoc_deg_I	-0.0221	0.0263	-0.84	0.402		-0.0062	0.007
hs_senior_I	0.3745	0.0047	79.71	0.000	***	0.1121	0.308
fail_exit_I	-0.0012	0.0835	-0.01	0.988		-0.0004	0.001
adulted_15cred_I	0.6936	0.0102	67.74	0.000	***	0.2399	0.037
adult_hs_I	-0.0220	0.0189	-1.16	0.245		-0.0062	0.014
sem_college_I	0.0237	0.0149	1.59	0.112		0.0068	0.022
home_school_I	-0.1455	0.0312	-4.66	0.000	***	-0.0388	0.006
GED_II	0.0411	0.0113	3.63	0.000	***	0.0118	0.040
other_non_trad_II	0.2077	0.1041	2.00	0.046	**	0.0638	0.000
corr_school_II	0.1416	0.0784	1.80	0.071	*	0.0424	0.001
cert_attnd_II	-0.2937	0.1404	-2.09	0.037	**	-0.0729	0.000
ngycp_II	0.0656	0.0358	1.83	0.067	*	0.0191	0.004
no_cred_III	0.0331	0.0131	2.52	0.012	**	0.0095	0.029
_cons	-0.9724	0.0031	-316.98	0.000	***		

Probit regression. Dependent variable is "attrited in DEP"
Education tier denoted by Roman numeral
* Indicates coefficient is significant at 10-percent level or better
** Indicates coefficient is significant at 5-percent level or better
*** Indicates coefficient is significant at 1-percent level or better
Traditional high school graduate is omitted category
Number of obs = 459,273 Pseudo R^2 = 0.0209
Source: Derived from PRIDE data files (CNRC, 2007).

The results from the full model are available in Table 76, Appendix C. The results for the control variables were somewhat different than previous full regressions. The reclass variable is again significant, and shows positive effects, while being 17-years old is no longer significant. The fiveYO program is again significant and shows positive effects, but the TEP and NCSA programs are no longer significant.

The estimates of the primary independent variables in the full regression (education credentials) were quite different than the preliminary regression results. Only bach_deg, hs_senior, fail_exit,adult_ed15cred, GED, and cert_attnd showed the same level of significance. Variables that became insignificant are: mast_deg, home_school, other_non_trad, and corr_school. Assoc_deg is now significant. Table 24 shows the regression results for the primary variables. Based on partial effects of the regression, high school seniors and members enrolled in adult education or 15 college credits showed the greatest probabilities for discharge, with probabilities of attrition of 9.62 and 23.37 percentage points, respectively, higher than high school graduates. Bachelor’s degree holders, GED holders, and dropouts also showed very significant increases in the probability of attrition. Associate’s degree holders had the largest negative effect on attrition, decreasing the probability of discharge by 1.62 percentage points compared to high school graduates. The pseudo R-squared value was 0.0481, which was higher than any pseudo R-squared value from previous full regressions.

Table 24. Final DEP Attrition Regression Results, Education Credentials

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
mast_deg_I	0.1009	0.1029	0.98	0.327	0.0292	0.000
bach_deg_I	0.1418	0.0193	7.35	0.000***	0.0417	0.014
assoc_deg_I	-0.0599	0.0273	-2.19	0.028**	-0.0162	0.007
hs_senior_I	0.3294	0.0067	48.83	0.000***	0.0962	0.308
fail_exit_I	-0.0760	0.0844	-0.90	0.368	-0.0204	0.001
adulted_15cred_I	0.6849	0.0107	64.00	0.000***	0.2337	0.037
adult_hs_I	0.0560	0.0193	2.90	0.004***	0.0159	0.014
sem_college_I	0.0582	0.0153	3.82	0.000***	0.0165	0.022
home_school_I	-0.0205	0.0317	-0.65	0.517	-0.0057	0.006
GED_II	0.0822	0.0116	7.09	0.000***	0.0236	0.040
other_non_trad_II	0.0508	0.1057	0.48	0.631	0.0144	0.000
corr_school_II	0.0302	0.0798	0.38	0.705	0.0085	0.001
cert_attnd_II	-0.2910	0.1419	-2.05	0.040**	-0.0707	0.000
ngycp_II	0.1080	0.0364	2.97	0.003***	0.0313	0.004
no_cred_III	0.0522	0.0136	3.83	0.000***	0.0148	0.029

Probit regression. Dependent variable is "attrited in DEP"
Education tier denoted by Roman numeral
* Indicates coefficient is significant at 10-percent level or better
** Indicates coefficient is significant at 5-percent level or better
*** Indicates coefficient is significant at 1-percent level or better
Traditional high school graduate is omitted category
Number of obs = 459,273 Pseudo R^2 = 0.0481
Source: Derived from PRIDE data files (CNRC, 2007).

g. Regression Analysis of Enlistment Programs

The preliminary regression on enlistment programs used the GENDET program for the base group. The SG, fiveYO, TEP, and Other enlistment programs each showed positive and significant effects on attrition. The AEF, ATF, NF, and GTEP programs had negative and significant effects on attrition. All other enlistment programs were statistically insignificant. Table 25 shows the preliminary regression results.

Table 25. Preliminary DEP Attrition Regression, Enlistment Programs

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
SG	0.1088	0.0055	19.64	0.000***	0.03142	0.41
fiveYO	0.0927	0.0070	13.32	0.000***	0.02727	0.151
AEF	-0.0373	0.0097	-3.83	0.000***	-0.0105	0.062
ATF	-0.0341	0.0186	-1.84	0.066*	-0.0097	0.014
NF	-0.1596	0.0105	-15.24	0.000***	-0.0431	0.056
GTEP	-0.1424	0.0150	-9.52	0.000***	-0.0385	0.024
TEP	0.0369	0.0150	2.46	0.014**	0.01074	0.021
twoYO	-0.0402	0.0380	-1.06	0.290	-0.0113	0.003
threeYO	0.0062	0.0236	0.26	0.794	0.00178	0.008
NCSA	0.0206	0.0221	0.93	0.351	0.00594	0.01
NPSB	-0.0045	0.0435	-0.10	0.917	-0.0013	0.002
other_ep	0.0284	0.0170	1.67	0.095*	0.00823	0.016
_cons	-0.8579	0.0045	-189.79	0.000***		

Probit regression. Dependent variable is "attrited in DEP"
* Indicates coefficient is significant at 10-percent level or better
** Indicates coefficient is significant at 5-percent level or better
*** Indicates coefficient is significant at 1-percent level or better
GENDET is omitted category
Number of obs = 459,273 Pseudo R^2 = 0.0209
Source: Derived from PRIDE data files (CNRC, 2007).

The results of the full regression are available in Table 76, Appendix C. Table 26 presents the regression results for the primary independent variables (enlistment programs). The estimates of the primary variables were quite different than the results in the preliminary results. The AEF and TEP programs are no longer significant, the fiveYO is now less significant, and the ATF and NPSB programs are now more significant. The SG and fiveYO programs were the only programs to show positive effects (at the 1-percent level and 10-percent level respectively). The ATF, NF, GTEP, and NPSB programs showed negative effects. Based on partial effects of the regression, the NF program lowered attrition probability by 3.89 percentage points. The SG program raised the probability of attrition by 1.38 percentage points.

Table 26. Final DEP Attrition Regression Results, Enlistment Programs

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
SG	0.0495	0.0062	7.94	0.000***	0.0138	0.410
fiveYO	0.0138	0.0077	1.79	0.073*	0.0039	0.151
AEF	0.0121	0.0114	1.06	0.289	0.0034	0.062
ATF	-0.0729	0.0195	-3.74	0.000***	-0.0196	0.014
NF	-0.1483	0.0130	-11.44	0.000***	-0.0389	0.056
GTEP	-0.1481	0.0156	-9.50	0.000***	-0.0386	0.024
TEP	-0.0254	0.0156	-1.63	0.104	-0.0070	0.021
twoYO	0.0049	0.0385	0.13	0.899	0.0014	0.003
threeYO	0.0027	0.0245	0.11	0.913	0.0007	0.008
NCSA	-0.0311	0.0231	-1.34	0.179	-0.0085	0.010
NPSB	-0.0971	0.0442	-2.20	0.028**	-0.0259	0.002

Probit regression. Dependent variable is "attrited in DEP"
* Indicates coefficient is significant at 10-percent level or better
** Indicates coefficient is significant at 5-percent level or better
*** Indicates coefficient is significant at 1-percent level or better
GENDET is omitted category
Number of obs = 459,273 Pseudo R^2 = 0.0481
Source: Derived from PRIDE data files (CNRC, 2007).

h. Regression Analysis of Women and Traditional Occupations

In this section, the sample group only consists of women in the DEP. The preliminary regression on traditional jobs for women used non-traditional jobs as the base group. Traditional female jobs was significant at the 1-percent level and showed positive effects on attrition probability. Table 27 shows the preliminary regression results.

Table 27. Preliminary DEP Attrition Regression, Women and Ratings

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
trad_fem	0.0510	0.0092	5.53	0.000***	0.0172	0.380
_cons	-0.6060	0.0057	-105.83	0.000***		

Probit regression. Dependent variable is "attrited in DEP"
*** Indicates coefficient is significant at 1-percent level or better
Nontraditional female ratings is omitted category
Number of obs = 88,405 Pseudo R^2 = 0.0003
Source: Derived from PRIDE data files (CNRC, 2007).

The results of the intermediate regression are available in Table 77, Appendix C. The results for the control variables for the sample of women were quite different than the previous regressions on the entire DEP population. The following variables resulted in positive effects on DEP discharge: reclass, 19 years and older, married, afqt, bach_deg, hs_senior, adulted_15cred, adult_hs, sem_college, GED, days_dep, and each fiscal year. Variables resulting in negative effects on DEP attrition were: unemp_rate, enl_bonus, blk_only, hsp_only, api_only, multi, days_dep_sq, E2, and E3. Most NRDs had lower attrition than Atlanta.

In the full model, the effect of the primary independent variable (traditional female jobs) is now the opposite of the results in the preliminary regression result. Table 28 shows that women with traditional female jobs, compared to women with nontraditional jobs, had negative a effect on the probability of attrition when control variables were included. Traditional jobs lowered the probability of DEP discharge by 1.35 percentage points, holding all other variables constant, compared to women in nontraditional jobs. In the preliminary regression, women with traditional jobs had higher attrition (by 1.72 points).

Table 28. Intermediate DEP Attrition Regression Results, Women and Tradition Occupations

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
trad_fem	-0.0419	0.0099	-4.22	0.000***	-0.0135	0.380

Probit regression. Dependent variable is "attrited in DEP"
*** Indicates coefficient is significant at 1-percent level or better
Nontraditional female ratings is omitted category
Number of obs = 88,392 Pseudo R^2 = 0.0886
Source: Derived from PRIDE data files (CNRC, 2007).

The results of the full regression are available in Table 78, Appendix C. The results for the control variables were very similar to the intermediate regression on the female sample. The only difference was the coefficient for women who are 23 years old or older is no longer significant.

For the final regression, dummy variables were created for each traditional female rating and the model was run on a sample of female DEP members only. The estimate of the primary independent variables (all traditional ratings) fully supported the intermediate regression result. “Nontraditional female ratings” was used as the base group for this regression. Table 29 shows that traditional ratings have varying degrees of significance and effects on attrition, compared to nontraditional ratings. The AC, AG, AZ, OS, PS, RP, SK, and YN ratings showed attrition rates not significantly different than nontraditional ratings, holding all else constant. The CS, PC, and SH ratings had higher attrition rates, compared to nontraditional ratings.

And, the CTI, CTR, HM, IS, IT, MC, and MU ratings predicted lower probabilities of attrition. The pseudo R-squared value of the full regression was 0.0903, nearly twice the value of previous regressions on the full DEP population. However, this model attempts to predict attrition only for women.

Table 29. Final DEP Attrition Regression Results, Women and Ratings (Traditional Rating Highlighted)

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
AC	-0.0332	0.0395	-0.84	0.400	-0.0106	0.014
AG	-0.0733	0.0743	-0.99	0.324	-0.0231	0.004
AZ	0.0451	0.0484	0.93	0.351	0.0148	0.009
CS	0.0564	0.0260	2.16	0.030**	0.0185	0.035
CTI	-0.4782	0.0464	-10.30	0.000***	-0.1288	0.014
CTR	-0.1599	0.0656	-2.44	0.015**	-0.0488	0.005
HM	-0.0431	0.0150	-2.88	0.004***	-0.0138	0.120
IS	-0.1863	0.0506	-3.68	0.000***	-0.0564	0.009
IT	-0.0846	0.0236	-3.58	0.000***	-0.0266	0.044
MC	-0.0964	0.0518	-1.86	0.063*	-0.0301	0.008
MU	-0.7293	0.1675	-4.35	0.000***	-0.1739	0.001
OS	-0.0435	0.0285	-1.53	0.127	-0.0139	0.028
PC	0.2737	0.1146	2.39	0.017**	0.0954	0.002
PS	-0.0215	0.0346	-0.62	0.534	-0.0069	0.018
RP	-0.0784	0.1078	-0.73	0.467	-0.0246	0.002
SH	0.1274	0.0450	2.83	0.005***	0.0427	0.010
SK	0.0300	0.0299	1.00	0.316	0.0098	0.025
YN	-0.0135	0.0274	-0.49	0.623	-0.0043	0.032

Probit regression. Dependent variable is "attrited in DEP"

* Indicates coefficient is significant at 10-percent level or better

** Indicates coefficient is significant at 5-percent level or better

*** Indicates coefficient is significant at 1-percent level or better

Nontraditional female ratings is omitted category

Number of obs = 88,392 Pseudo R^2 = 0.0903

Source: Derived from PRIDE data files (CNRC, 2007).

8. Summary of Results from DEP Data Analysis

- The average time a person spends in DEP before starting active duty increased from 92 days (1998) to 157 days (2005), peaking at 173 days in 2003.

- The annual attrition rate increased from 18.5 percent (1998) to 23.6 percent (2005), and was closely correlated with the average yearly time in DEP.
- Attrition rates tend to increase as time in DEP increases, with the maximum rates at approximately 320 days in DEP (and a corresponding, estimation attrition rate of 35 percent).
- Average AFQT percentile score has increased by nearly 4 points over the course of the study, rising from 58.8 (1998) to 62.7 (2005).
- Average attrition rates of DEP members in school, both high school seniors and GED holders attending a semester of college (27.6 percent and 39.0 percent, respectively), were considerably higher than those of members not in school (16.3 percent).
- Attrition rates of A, B, and Cu-Cell DEP members who were not in school were very similar to each other and lower than those of A and Cu-Cell DEP members who were still in school.
- The only enlistment program with statistically significant lower attrition, compared with that of GENDETs (general detail apprentices) is the Nuclear Field (NF) program. The higher attrition rates of the other programs are closely correlated with time in DEP. The lower attrition rates of the NF program are likely due to the specific program requirements, which tend to be highly selective.
- Approximately 19 percent of all DEP members over the course of the study were women. Women generally spent a longer time in DEP (119 days, on average) than men (135 days, on average) and, statistically, had significantly higher attrition rates.
- Attrition rates of A and Cu-Cell women who were still in school were generally much higher than for their counterparts who were not in school.
- Women in traditional ratings averaged a longer time in DEP (163 days) compared with their counterparts in nontraditional ratings (121 days).

- DEP times for women designated for both traditional and nontraditional occupations were strongly correlated with attrition rates.
- Regression results on the entire DEP sample supported the results from the trend analyses. With all other factors held constant, the variables that resulted in *higher* attrition rates were: being reclassified to a new job while in DEP, being 19 years old or older, being a single or married woman, being in DEP for a longer time, enlisting in each fiscal year past FY1998, having a Bachelor's degree, being high school senior, being enrolled in adult education or 15 college credits, having an adult education diploma, having a GED with a semester of college, having a GED, completing the National Guard Youth ChalleNGe Program, or having no credential, and enlisting in the SG or 5YO programs.
- The variables that resulted in *lower* attrition rates were: higher unemployment rates, receiving an enlistment bonus, being a married man, being an API/NatAm, enlisting as an E2 or E3, having an Associate's degree or certificate of attendance, enlisting in the ATF, NF, GTEP, or NPSB programs, enlisting from NRDs Chicago, Dallas, Denver, Houston, Jacksonville, Los Angeles, Miami, Minneapolis, New England, New York, Philadelphia, Phoenix, Pittsburgh, Portland, Raleigh, Richmond, San Diego, San Francisco, Seattle, or St. Louis.

IV. ANALYSIS OF RECRUIT TRAINING COMMAND ATTRITION

A. DATA

The same data set used for the DEP analysis was used for the RTC analysis. The source database contained 570,354 observations with data from fiscal years 1997 through 2007. Due to incomplete records from fiscal years 1997, 1998, 1999, 2000, 2006, and 2007, these years were dropped (n=357,104). The final number of records for analysis was 213,250 and covered fiscal years 2001 through 2005. Stata™ statistics and data analysis software was used to process and analyze the data.

B. METHODOLOGY

The five years of enlisted cohort data were used to analyze attrition patterns of various groups of education credential holders, enlistment programs, races, genders, and ratings. CNRC provided an "RTC attrition" field for each record, and it is defined as the failure to complete recruit training.

1. Variables

The variables of interest in the education and tier evaluation section are AFQT score and education credential, because these are the variables used by recruiting commands to determine initial enlistment eligibility. There are 15 education credentials present in the data but only 14 have sufficient quantities for meaningful analysis. Tier I education variables are: hs_grad, fail_exit, adult_hs, sem_college, assoc_deg, bach_deg, mast_deg, and home_school. Tier II education variables are: GED2, other_non_trad, corr_school, cert_attnd, and ngycp. The Tier III education variable is: no_cred.

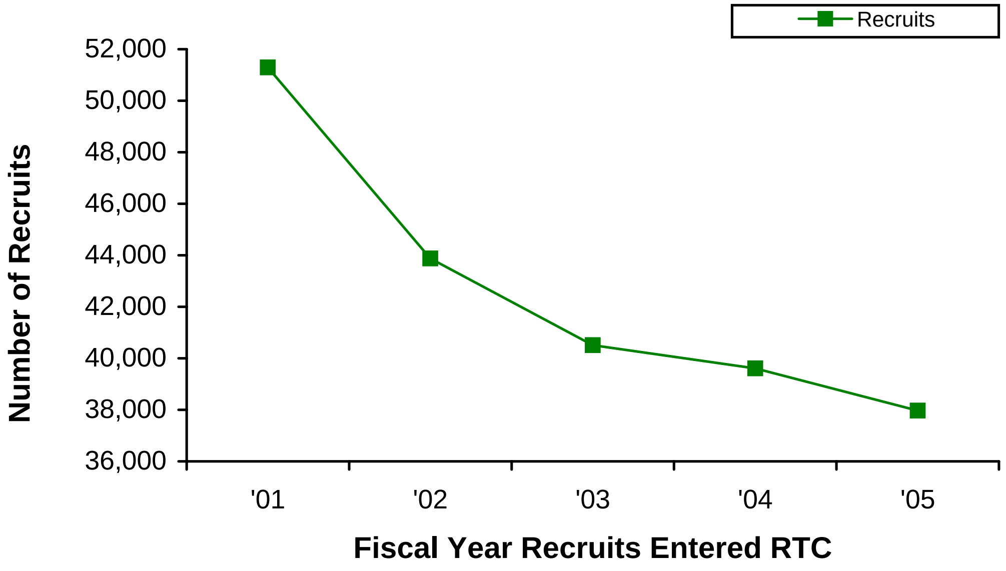
The variables of interest in the enlistment program section are each of the various enlistment programs available to applicants. There are 16 enlistment programs present in the data, but many are obsolete and not currently valid enlistment programs. Many of the obsolete programs are included in the analysis for a historical perspective of enlistment program DEP attrition performance. Enlistment program variables included in this analysis are: twoYO, threeYO, GENDET, SG, fiveYO, AEF, ATF, NF, GTEP, NCSA, NPSB, and TEP.

C. RESULTS

This section presents the results of Recruit Training Command enlistment trends and attrition analysis by education credential, AFQT category, enlistment program, gender, race, and occupational rating.

1. RTC Enlistment and Attrition Trends

Over 213,000 men and women shipped to the Navy’s Recruit Training Command at Great Lakes, Illinois as non-prior service enlisted members between FY2001 and FY2005. Figure 58 shows the number of recruits dropped from just over 51,000 in FY2001 to under 38,000 in FY2005.

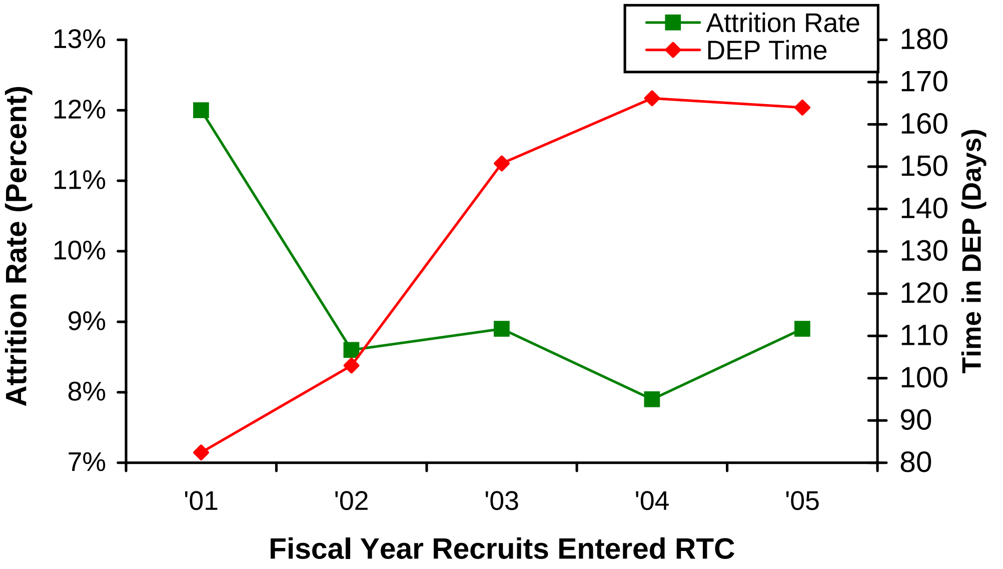


Source: Derived from PRIDE data files (CNRC, 2007).

Figure 58. Total Number of RTC Recruits by Year of Entry, Fiscal Years 2001-2005

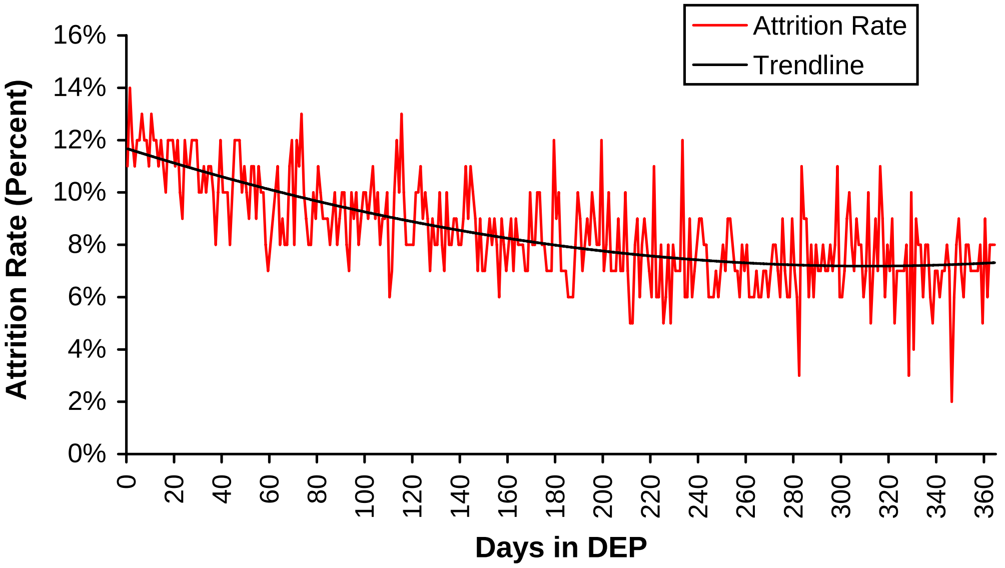
Recruit attrition rates over the period examined in this study dropped significantly. Figure 59 shows that RTC attrition rates decreased from 12.0 percent in FY2001 to 8.9 percent in FY2005. Figure 50 also shows the average number of days recruits spent in DEP over the period of this study. Between FY2001 and FY2004, time in DEP more than doubled, rising from 82 days to 166 days in four years. This suggests a strong negative correlation between average time in DEP and the overall attrition rate. As time in DEP increased, RTC attrition rates decreased, suggesting that recruits who spend a longer time in DEP have already shown they are dedicated to the Navy and continue their dedication at RTC.

The data in Figure 60 show average attrition rates per days in DEP during FY2001 through FY2005. The figure confirms that, as time in DEP rises, RTC attrition rates tend to decline.



Source: Derived from PRIDE data files (CNRC, 2007).

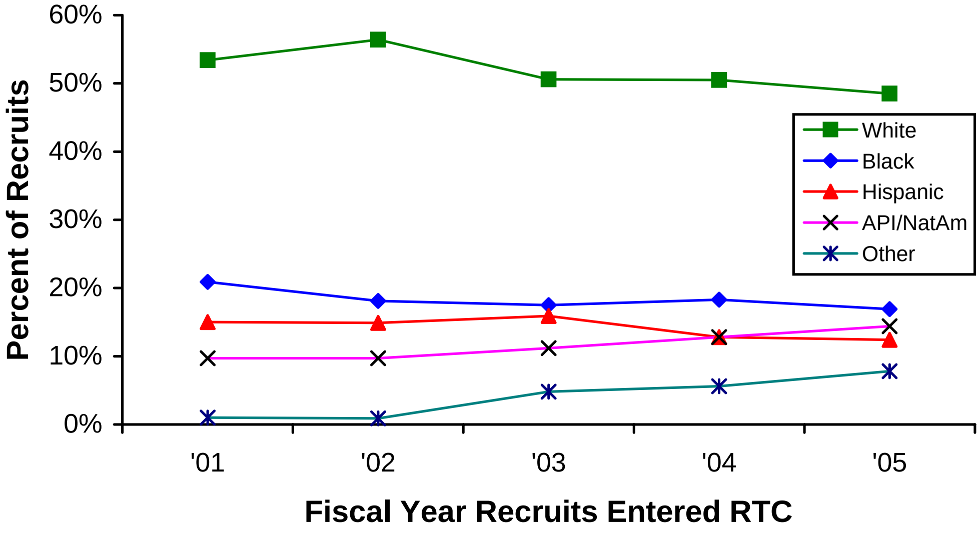
Figure 59. Comparison of Attrition Rate and Time in DEP for RTC Accessions by Year of Entry, Fiscal Years 2001-2005



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 60. Average RTC Attrition Rate per Days in DEP, Fiscal Years 2001-2005

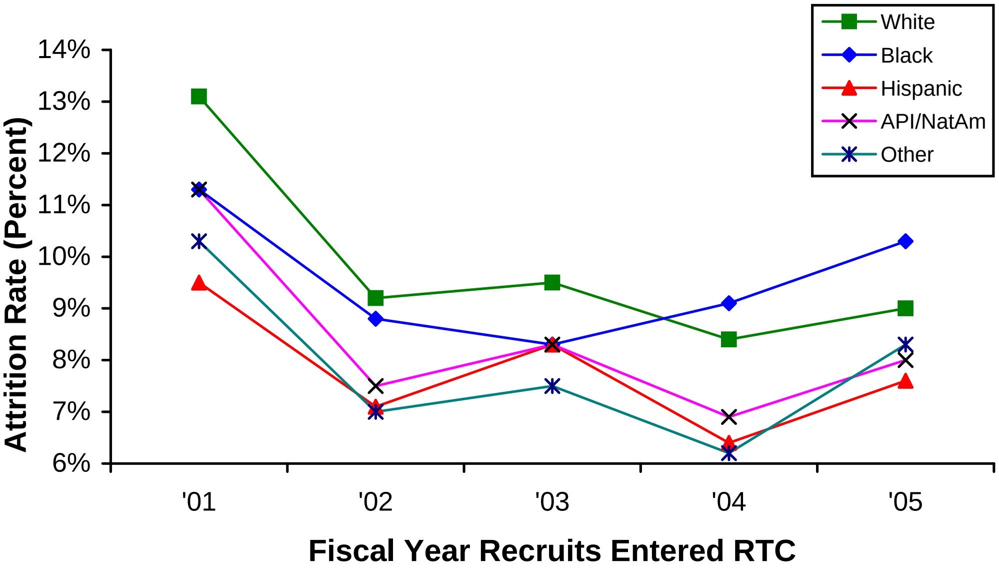
Data provided in Figure 61 show sizable differences in RTC accessions among the different racial/ethnic groups during the time frame covered in this study. White recruits were by far the largest group, but showed a decreasing trend in the overall proportion (falling from 53.4 percent in FY2001 to 48.5 percent in FY2005). Blacks comprised the second largest racial/ethnic group and also showed a decreasing trend (from 20.9 percent in FY2001 to 16.9 percent in FY2005). Hispanics also showed a decreasing trend, dropping from 15 percent in FY2001 to 12.4 percent in FY2005. The Asian, Pacific Islander, and Native American (API/NatAm) racial groups showed a gradually rising trend over the course of the study (from 9.7 percent to 14.4 percent). The “Other” category shows members who did not provide racial or ethnic information or chose more than one race or ethnicity. This group increased from 1 percent in FY2001 to 7.8 percent in FY2005. The DoD race codes changed in January 2003 providing many more choices for new recruits, who self-select their race or ethnicity during enlistment processing.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 61. Percent of RTC Recruits by Race/Ethnicity and Year of Entry, Fiscal Years 2001-2005

Attrition rates for each racial/ethnic group varied over the course of this study, but most showed similar trends. Figure 62 shows that the attrition trends for White, Hispanic, API/NatAm, and Other members closely resemble the overall trend from Figure 59. The trend for Black recruits, however, dropped through FY2003 and increased again through FY2005. White recruits had the highest rates through FY2003 and were eclipsed by Black recruits in FY2004. Rates for Hispanics, API/NatAms, and Others were lower than those for Whites during the period examined in this study.

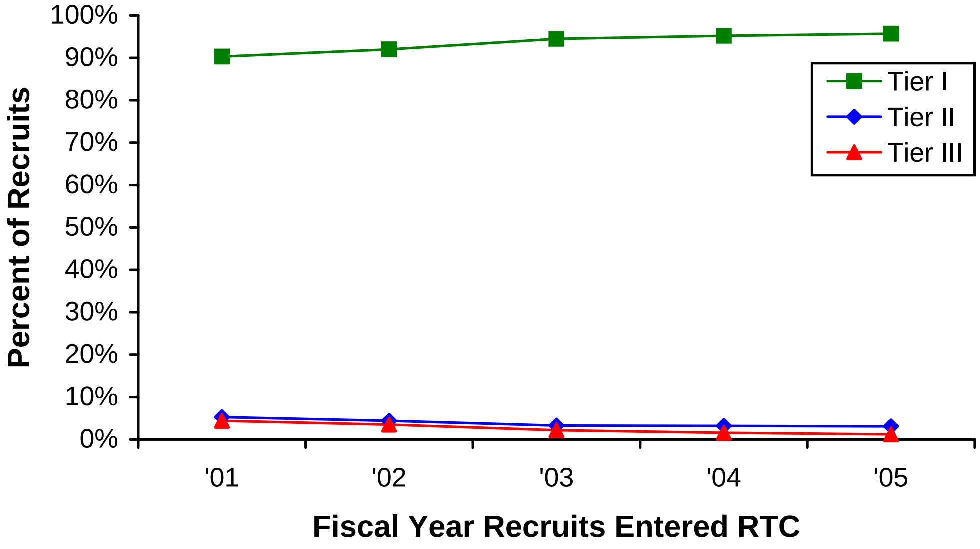


Source: Derived from PRIDE data files (CNRC, 2007).

Figure 62. Attrition Rate of RTC Recruits by Race/Ethnicity and Year of Entry, Fiscal Years 2001-2005

2. RTC Enlistment and Attrition Trends by Educational Tier, Recruit Quality Matrix Cell, and AFQT Score

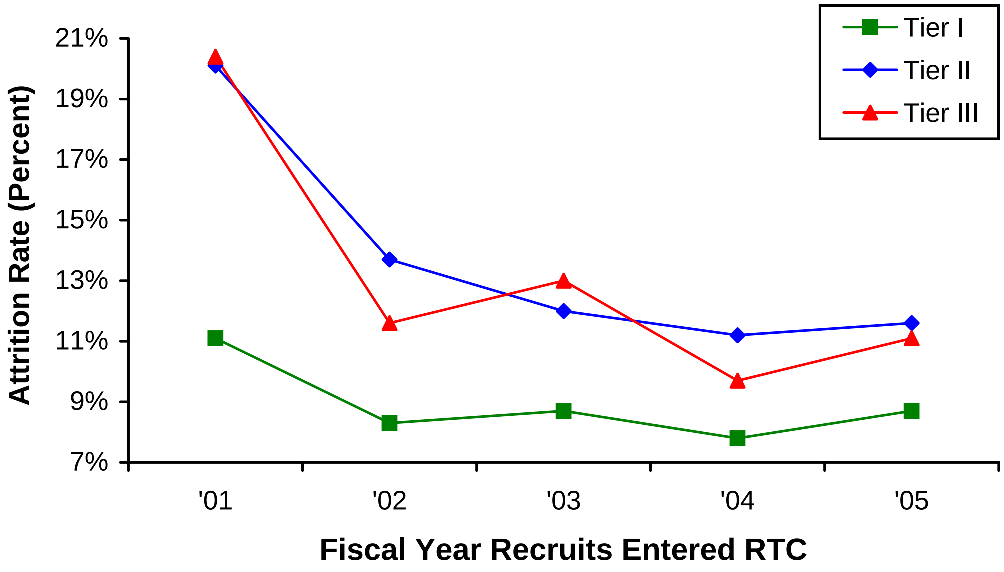
The DoD Tier system and Navy Recruit Quality Matrix were designed based on first-term attrition rates. RTC is only a short period (typically nine weeks) of a Sailor’s first-term, but overall first-term attrition trends can be predicted from RTC attrition. Figure 63 shows the percentage of recruits in education Tier I has steadily risen over time. Tier I started at a low of 90.3 percent in FY2001 and reached its highest point in FY2005, at 95.7 percent. Tier II recruits started with their maximum of 5.3 percent and dropped to 3.1 percent. Tier III’s maximum was in FY2001 at 4.4 percent, falling to a low of 1.2 percent in FY2005.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 63. Percent of RTC Recruits In Each Education Tier by Year of Entry, Fiscal Years 2001-2005

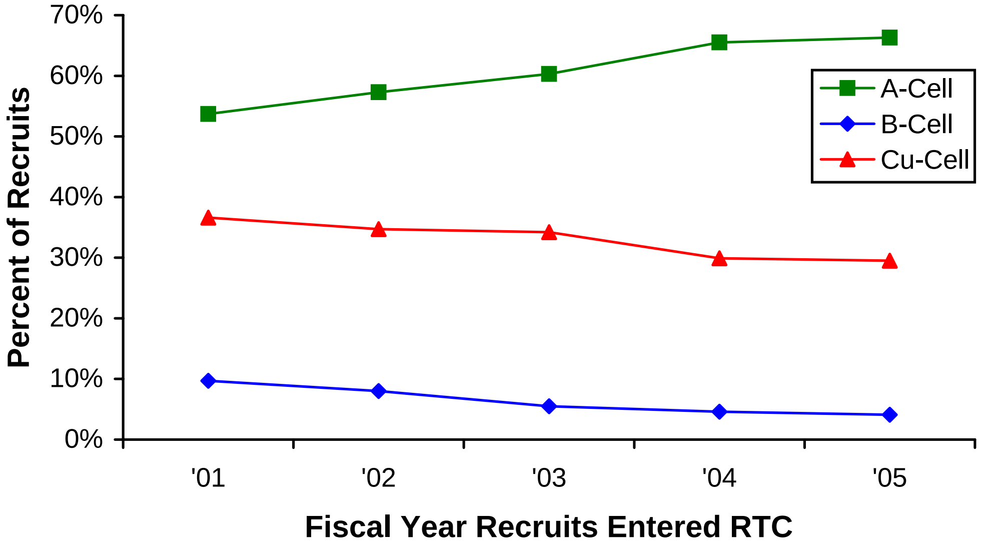
Attrition rates for each Tier group are presented in Figure 64. The trends for each group are similar, with the highest attrition rates in FY2001, followed by a declining trend. Tier I recruits consistently showed lower attrition rates than did their counterparts in the other Tiers, but each year the attrition rate fluctuated down or up. Tier II attrition rates dropped each year through FY2004 and crept up slightly in FY2005. The trend for Tier III recruits was similar to that of recruits in Tier I, fluctuating down or up each year.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 64. Attrition Rates of RTC Recruits by Education Tier and Year of Entry, Fiscal Years 2001-2005

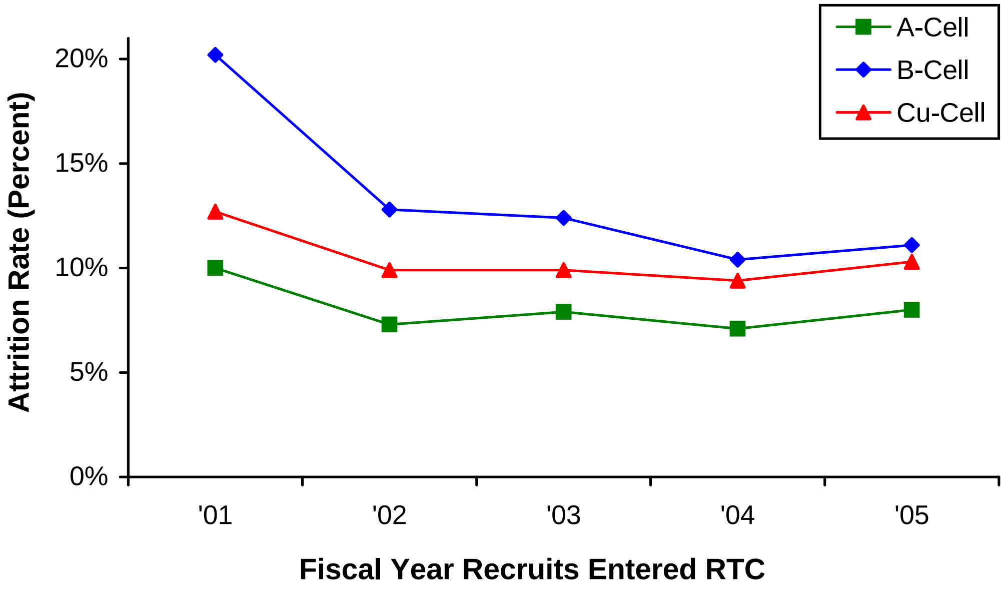
Figure 65 shows the percentage of DEP members in each Recruit Quality Matrix cell. The percentage of A-Cell recruits increased each year from, 53.7 percent in FY2001 to 66.3 percent in FY2005. B-Cell and Cu-Cell recruits displayed an opposite trend to those in the A-Cell. The highest percent of B-Cell recruits was 9.7 percent, and the lowest was 4.1 percent. Cu-Cell recruits were at a high of 36.6 percent in FY2001 and reached their low of 29.5 percent in FY2005.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 65. Percent of RTC Recruits In Each Recruit Quality Matrix Cell by Year of Entry, Fiscal Years 2001-2005

Tier I recruits (A-Cell and Cu-Cell) had lower RTC attrition rates than did their counterparts in Tiers II and III (B-Cell). As Figure 66 shows, RTC attrition rates during the FY2001 to FY2005 period for A-Cell recruits were between 2 and 3 points lower than for Cu-Cell recruits. The gap between A-Cell and B-Cell narrowed each year, from 10.2 points in FY2001 to 3.1 points in FY2005. Attrition rates for B-Cell recruits dropped from 20.2 percent to 11.1 percent over the time period.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 66. Attrition Rates of RTC Members by Quality Matrix Cell and Fiscal Year

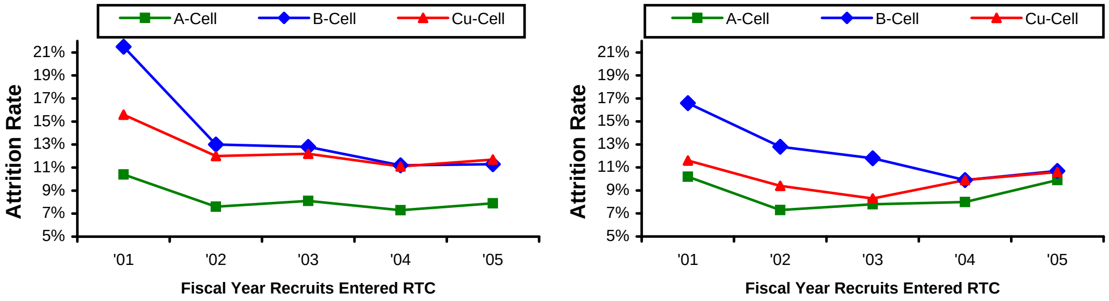
Table 30 show that, over the course of the study, A-Cell recruits had the lowest attrition rates at 8.1 percent. By comparison, Cu-Cell recruits were discharged at a rate of 10.6 percent and B-Cell recruits at a rate of 14.9 percent.

Table 30. Average RTC attrition Rates by Education Tier and Recruit Quality Matrix Cell, Fiscal Years 2001-2005

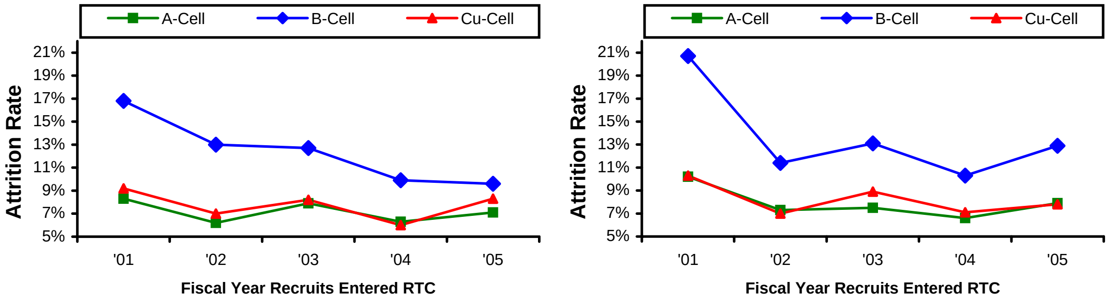
	Recruit Quality Matrix Cells			
Education Tier	A-Cell	B-Cell	Cu-Cell	Total
Tier I	8.1		10.6	9.0
Tier II		14.8		14.8
Tier III		15.0		15.0
Total	8.1	14.9	10.6	9.4%

Source: Derived from PRIDE data files (CNRC, 2007).

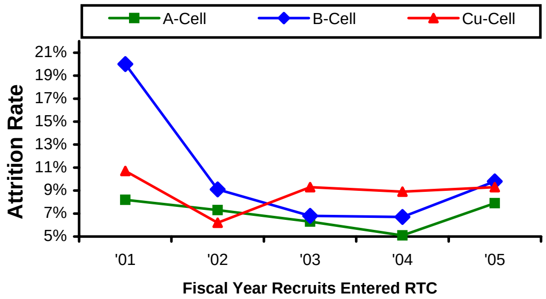
Attrition trends for White recruits by Recruit Quality Matrix cell resembled the overall trends, but with a wider gap between A-Cell and Cu-Cell recruits. As seen in Figure 67, attrition rates for Cu-Cell recruits actually jumped above those for recruits in the B-Cell in FY2005. Black recruits displayed different trends from their White counterparts. The spread between A-Cell and Cu-Cell recruits was narrower than the spread for White recruits, and rates for B-Cell and Cu-Cell recruits were nearly identical in fiscal years 2004 and 2005. A-Cell and Cu-Cell Hispanic members showed attrition trends and rates quite similar to each other. A and Cu-Cell API/NatAm members also showed trends and rates nearly identical to each other. Recruits in the “Other” group showed trends quite different from their counterparts in other racial/ethnic categories. A-Cell recruits typically had the lowest rates and Cu-Cell recruits jumped from the lowest rates in FY2002 to the highest in FY2003.



— White — — Black —



— Hispanic — — API/NatAm —

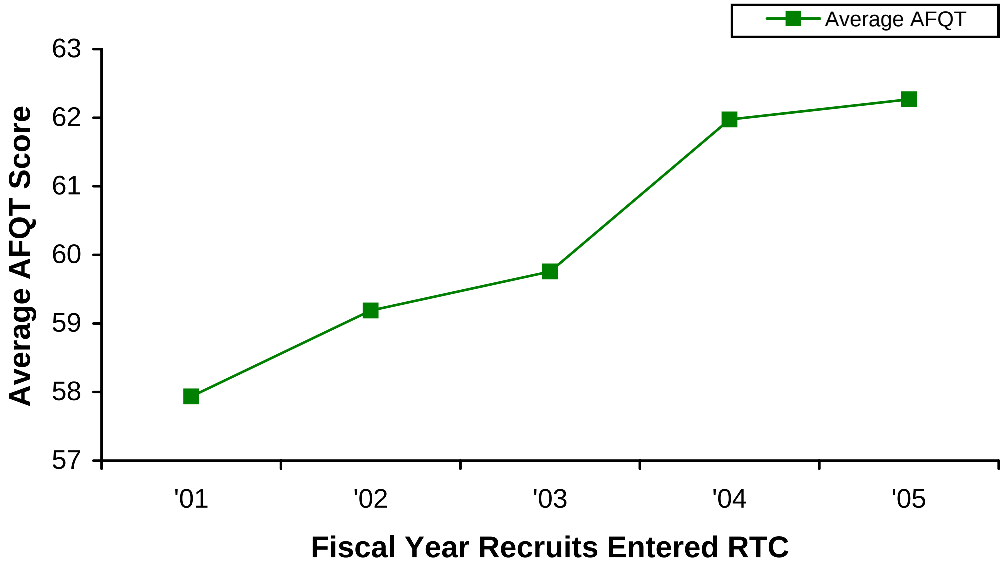


— Other—

Source: Derived from PRIDE data files (CNRC, 2007).

Figure 67. Attrition Rates of RTC Recruits by Race/Ethnicity, Recruit Quality Matrix Cell, and Year of Entry, Fiscal Years 2001-2005

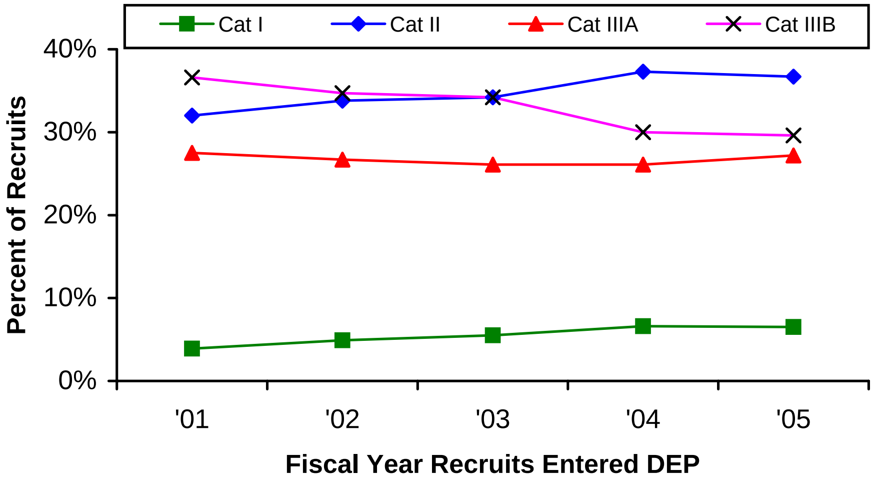
As the DEP analysis shows, over the period of this analysis the average AFQT percentile scores of new recruits has increased. Figure 68 shows that AFQT scores for recruits have steadily risen from 57.9 in FY2001 to 62.3 in FY2005.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 68. Average AFQT Percentile Score of RTC Recruits by Year of Entry, Fiscal Years 2001-2005

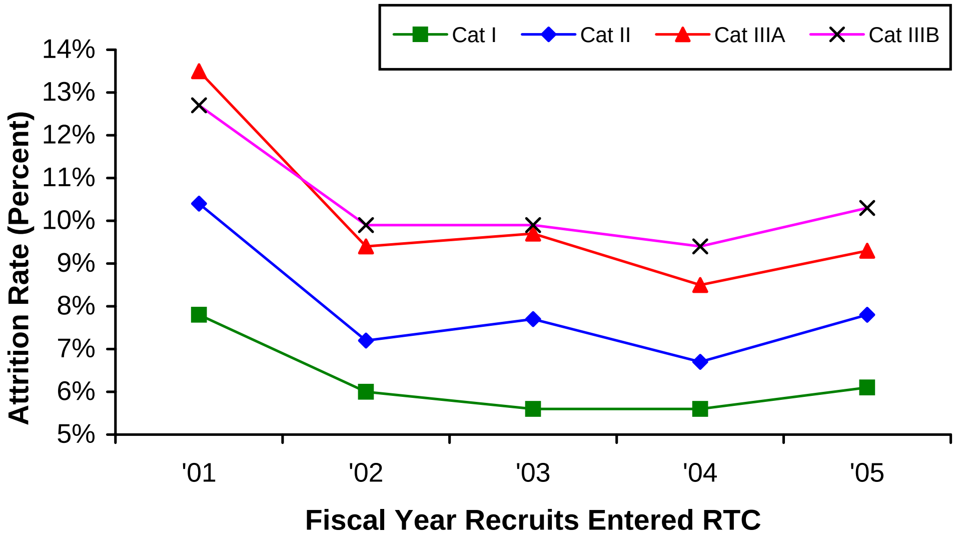
Figure 69 shows that the percentage of AFQT Category I recruits has steadily risen from 3.9 percent to 6.5 percent over the course of this study. The percentage of new recruits who scored in AFQT Category II also increased steadily from 32 percent to 36.7 percent. The proportion of AFQT Category IIIA recruits dropped slightly from 27.5 to 27.2 percent. Recruits in AFQT Category IIIB showed the largest change, dropping from 36.6 percent to 29.6 percent over the five years of this study.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 69. Percent of RTC Recruits by AFQT Category and Year of Entry, Fiscal Years 2001-2005

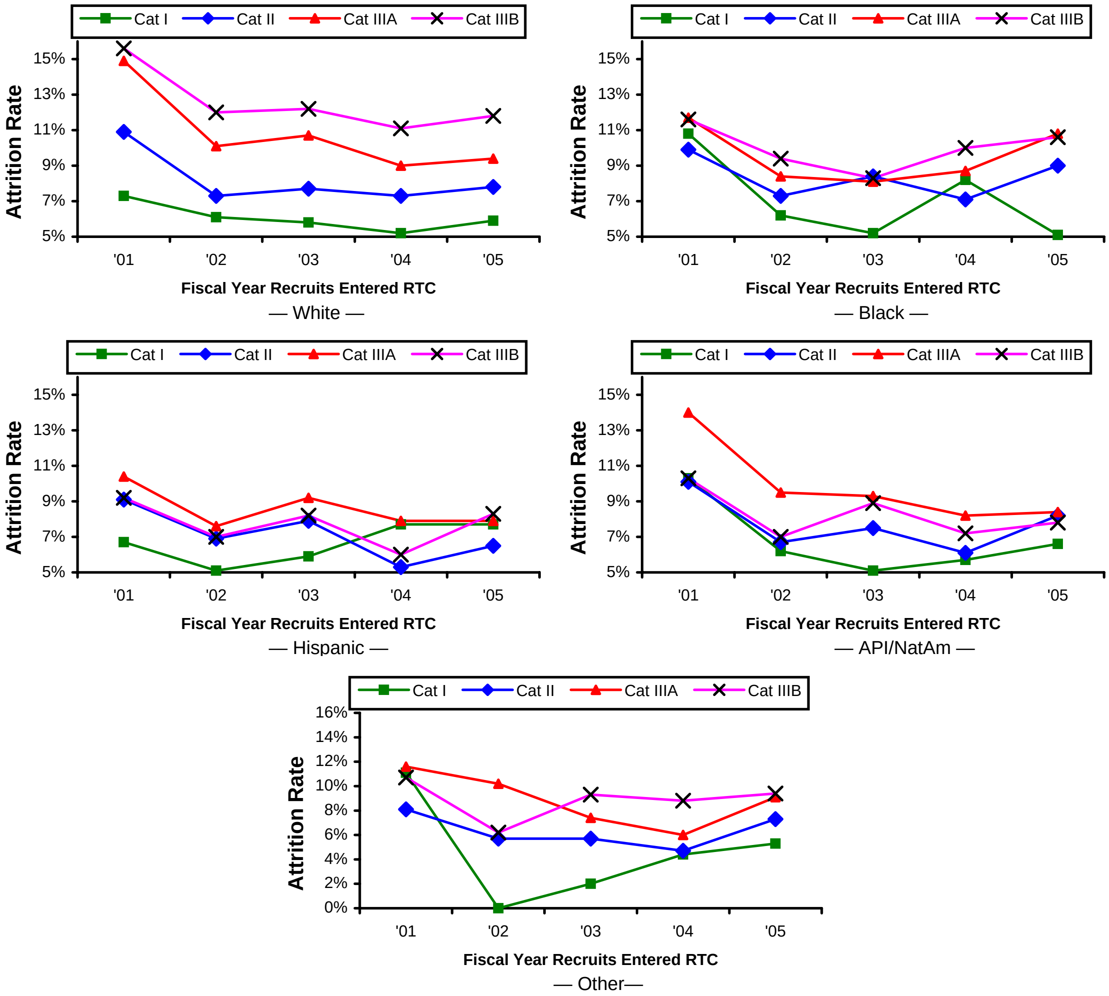
Figure 70 shows RTC attrition rates by AFQT category. Over the five years of the study, attrition rates were generally inversely proportional to AFQT category, with Category IIIB members having the highest rates and Category I members having the lowest rates. Category I attrition rates showed the smallest decline, from 7.8 percent to 6.1 percent. Category II attrition rates dropped 2.6 percentage points. Category IIIA showed the greatest decrease in attrition rates, dropping 4.2 percentage points in five years. Category IIIB attrition rates fell by 2.4 percentage points over the course of the study.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 70. Attrition Rates of RTC Recruits by AFQT Category and Year of Entry, Fiscal Years 2001-2005

Attrition rates and trends vary widely among the race/ethnicity groups and AFQT categories. Figure 71 shows that, for White recruits, as AFQT category increases, attrition rates decrease, with each category distinct from the others, and with a wide range of attrition rates. For Black recruits, the difference between the highest attrition rates and lowest rates are more compressed when compared with the rates for White recruits. AFQT Category IIIB typically had the highest attrition rates, and Category I or II had the lowest. For Hispanics, the differences among the AFQT categories are also compressed when compared with those of White recruits. Category IIIA Hispanics typically had the highest rates. Category I Hispanics jumped from the lowest rates in FY2003 to within 0.2 of a percentage point of the highest rates in FY2004. For API/NatAms, Category IIIA recruits showed the highest rates and Category I the lowest rates over the five years of this study. Attrition rates for Categories II and IIIB fluctuated between the I and IIIA rates. Prior to FY2003, very few recruits were in the "Other" category, and attrition rates varied greatly. Since FY2003, attrition rates have separated out by AFQT category with Category IIIB on the high end of the range and Category I on the low end.



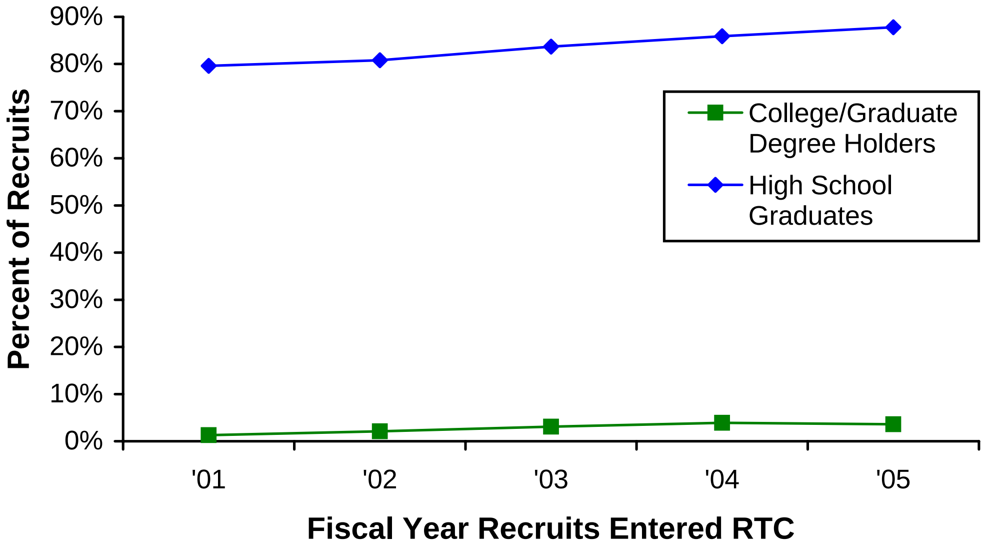
Source: Derived from PRIDE data files (CNRC, 2007).

Figure 71. Attrition Rates of RTC Recruits by Race/Ethnicity, AFQT Category, and Year of Entry, Fiscal Years 2001-2005

3. RTC Enlistment and Attrition Trends by Educational Credential

Although various personal characteristics have been linked to RTC and first-term attrition, years of formal education and type of education credential have consistently proven to be strong predictors of attrition. Tables 80 and 81 in Appendix D provide information on the number and percentage of new recruits within each education credential per fiscal year. Nearly 93 percent of all recruits were classified in the Tier I education category, including over 83 percent with a traditional high school diploma or college degree. Approximately 2.7 percent of recruits earned an Associate’s Degree or higher and 6.8 percent were non-traditional Tier I credential holders. About 4.6 percent of new recruits were Tier II, with GED holders forming the largest alternative education group, approximately 3.8 percent of all recruits. Non-graduates constituted only 2.7 percent of all recruits.

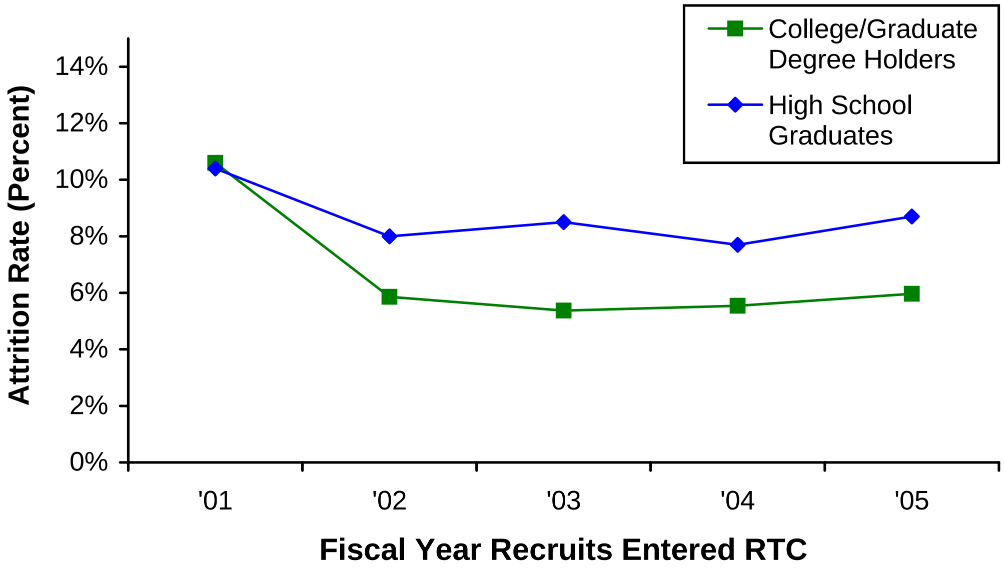
Figure 72 provides information on recruits possessing at least a high school diploma grouped by education credential and fiscal year. It shows that, while relatively few recruits possessed a college degree, college degree-holders have comprised a greater percentage of recruits since FY2001. As a group, the percentage of new recruits who were College/Graduate Degree holders increased from 1.3 percent to 3.6 percent, between FY2001 and FY2005. While not shown in Figure 72, the number of recruits possessing Associate’s Degrees increased from 0.5 percent to 1.3 percent and Bachelor’s Degree holders increased from 0.8 to 2.3 percent over the course of this study. Master’s Degree holders were only about 0.1 percent of the recruit population each fiscal year. The percentage of new recruits possessing a traditional high school diploma increased from 79.6 percent to 87.8 percent over the five years of this study.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 72. Percent of Recruits Who Earned a Traditional High School Diploma or College/Graduate Degree by Type of Credential and Year of Entry, Fiscal Years 2001-2005

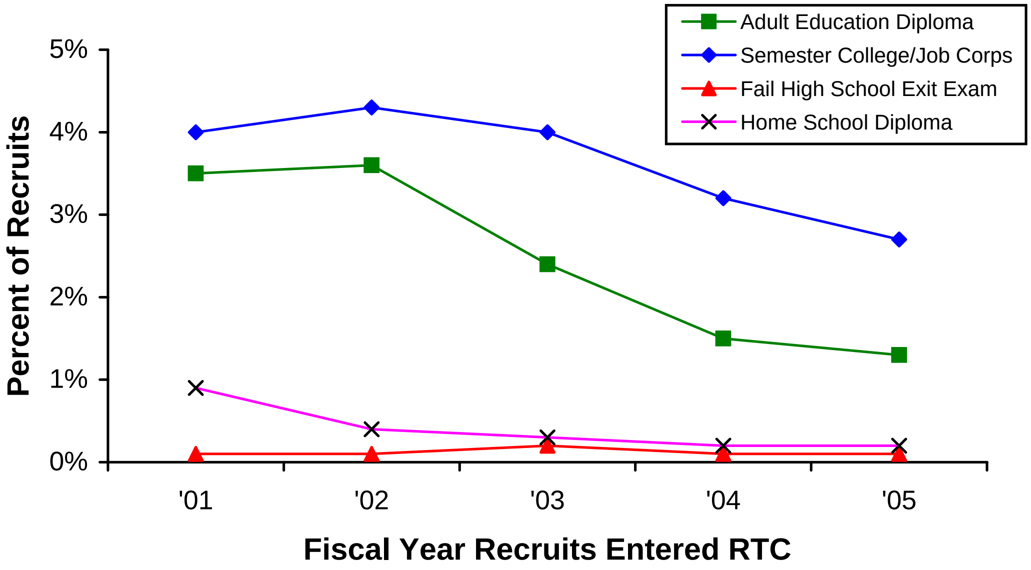
Attrition rates by education credential and year of entry are shown in Figure 74. High school graduates showed higher attrition rates, dropping from 10.4 percent to 8.7 percent. RTC attrition rates for College/Graduate Degree holders dropped from 10.6 percent, in FY2001, to 5.9 percent, in FY2005. While not shown in Figure 74, RTC attrition rates for Associate’s Degree holders dropped from 12.9 percent to 7.5 percent. Attrition rates for Bachelor’s Degree holders dropped from 9.3 percent to 5.5 percent over the five years of the study. Although Master's Degree holders comprised only a very small percentage of new recruits, their attrition rates also dropped each year, from 8.3 percent in FY2001 to zero attrition in FY2005.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 73. Attrition Rates of RTC Recruits Who Earned a Traditional High School Diploma or College/Graduate Degree by Type of Credential and Year of Entry, Fiscal Years 2001-2005

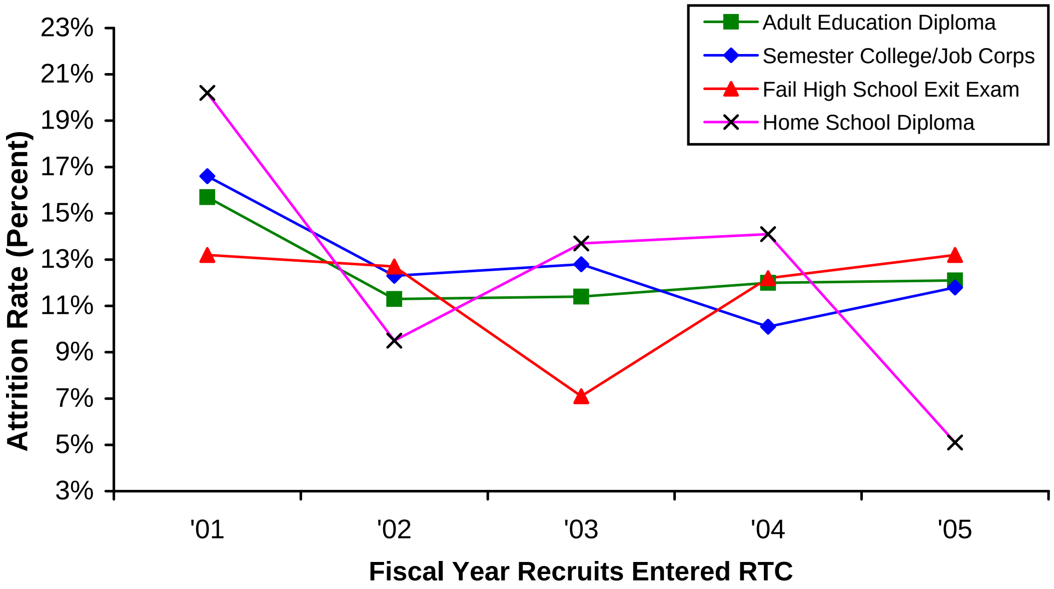
Figure 75 provides information on recruits possessing alternative Tier I education credentials grouped by fiscal year. Adult Education diploma members have shown a steady decline in percentage of total recruits, dropping from 3.5 percent in FY2001, to 1.3 percent in FY2005. The percentage of recruits who have a GED and earned 15 college credits or a Job Corps certificate of completion also dropped, from 4 percent to 2.7 percent. The proportion of recruits who failed their high school exit exam has steadily remained at approximately 0.1 percent. Home school diploma holders also dropped over the course of this study, from 0.9 percent of recruits to 0.2 percent.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 74. Percent of RTC Recruits Who Possessed a Nontraditional Tier I Education Credential by Type of Credential and Year of Entry, Fiscal Years 2001-2005

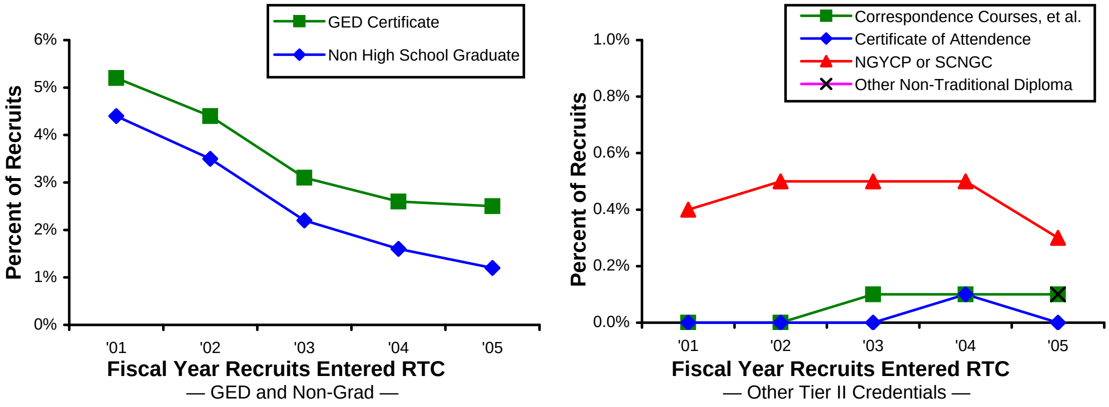
RTC attrition rates for non-traditional education Tier I recruits are shown in Figure 75. Attrition rates for adult education graduates dropped from 15.7 percent in FY2001 to 11.3 percent in FY2002, and then gradually increased again to 12.1 percent in FY2005. Recruits with a GED and one semester of college or a Job Corps certificate exhibited the down-and-up, fluctuating trend similar to the overall attrition trend. Recruits who failed their high school exit exam had fairly stable attrition rates, except for a dip in FY2003. Attrition rates for home school diploma graduates varied widely. This group showed the highest attrition rate in FY2001 at 20.2 percent. The next year they dropped to the lowest rate at 9.5 percent. In FY2003 and FY2004 this group again had the highest rate, dropping to the lowest rate in FY2005.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 75. Attrition Rates of RTC Recruits with Nontraditional Tier I Education Credentials, by Type of Credential and Year of Entry, Fiscal Years 2001-2005

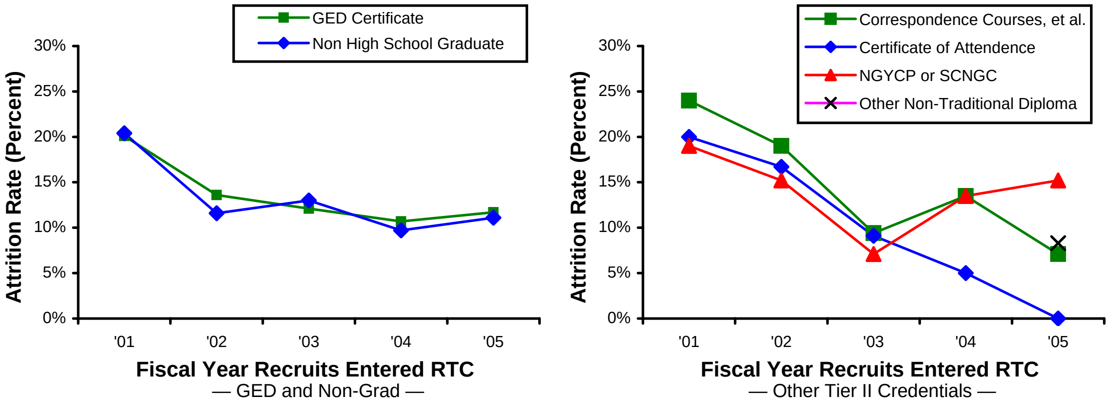
Figure 76 provides information on recruits possessing a Tier II or Tier III education credential grouped by fiscal year. GED certificate holders comprised the greatest percentage of non-Tier I recruits, followed by non-graduates. The percentage of recruits in these groups followed similar trends. Each group was at a maximum in FY2001 and dropped through FY2005. The remaining Tier II categories together comprised less than 1 percent of all new recruits for each fiscal year.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 76. Percent of Recruits Who Possessed a Tier II or Tier III Education Credential by Type of Credential and Year of Entry, Fiscal Years 2001-2005

RTC Attrition rates varied widely among the education groups. Figure 77 shows the two largest groups, GED holders and non-graduates, had similar attrition rates and their trends matched the overall attrition trend. The other groups, each with relatively few members, showed greater variability in attrition rates.

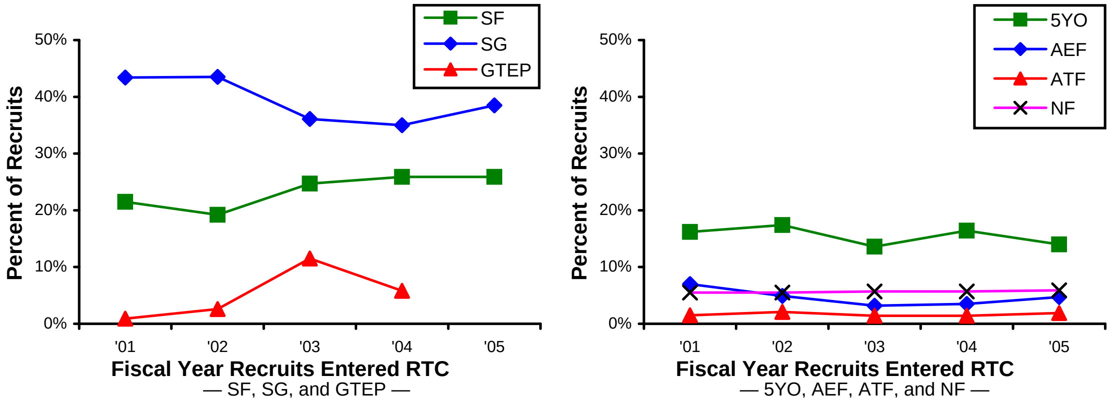


Source: Derived from PRIDE data files (CNRC, 2007).

Figure 77. Attrition Rates of RTC Recruits Who Possessed a Tier II or Tier III Education Credential by Type of Credential and Year of Entry, Fiscal Years 1998-2005

4. RTC Enlistment and Attrition Trends by Enlistment Program

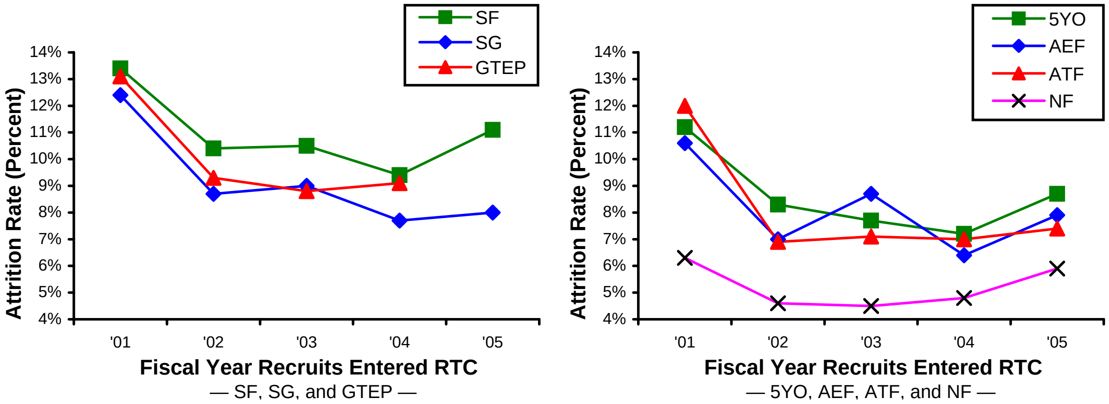
The analysis in this section is based on the recruits' enlistment program at the time they shipped to RTC. Figure 78 shows the trends in the various active component enlistment programs. The School Guarantee (SG) program consistently had the greatest percentage of recruits. The percentage of members in the SG program fluctuated during the time frame covered in this study. When the percentage of SG members dropped, there was a corresponding increase of one of the other enlistment programs. For example, in FY2002, the percentage of SG members decreased while the percentage of members in the Seafarer (SF) and GTEP programs increased correspondingly. GTEP was a short-lived program with a minimum of 0.9 percent in FY2001, peaked at 11.5 percent in FY2003, and was discontinued after FY2004. The SG program with a five-year obligor (5YO) experienced a gradually fluctuating trend over the five years of this study. The six-year obligor programs, Advanced Electronics Field (AEF), Advanced Technical Field (ATF), and Nuclear Field (NF), were relatively stable over time with the largest variation occurring in the AEF program.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 78. Percent of RTC Recruits in Active Component Enlistment Programs by Year of Entry, and Fiscal Years 2001-2005

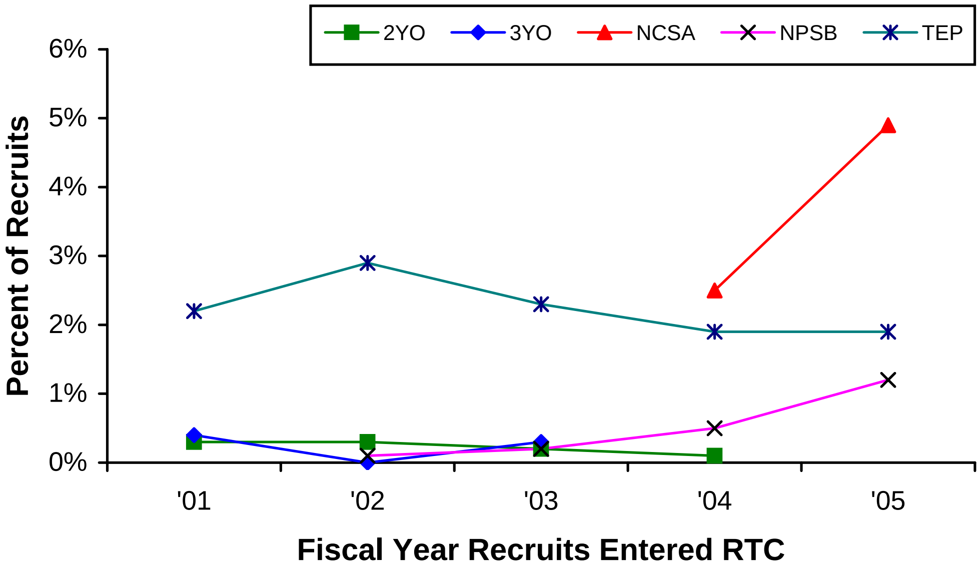
Attrition rates also varied widely over time and between programs. Figure 79 shows the SF program had the highest attrition rates every year with the familiar down-and-up trend seen in the overall attrition trend. SG and AEF programs had attrition trends similar to that of the SF trend, just with lower rates. The 5YO program RTC attrition rates dropped each year through FY2004 and increased again in FY2005. ATF program recruits had attrition rates that dropped by 5 percentage points between FY2001 and FY2002, and then remained fairly constant, around 7 percent, for the remainder of the study. The NF program attrition rates dropped through FY2003, and then increased again through FY2005. This program consistently had the lowest attrition rates of any enlistment program. The GTEP program showed the second highest attrition rates over the life of the program, decreasing from 13.1 percent to 9.1 percent between FY2001 and FY2005.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 79. Attrition Rates of RTC Recruits by Active Component Enlistment Program and Year of Entry, Fiscal Years 2001-2005

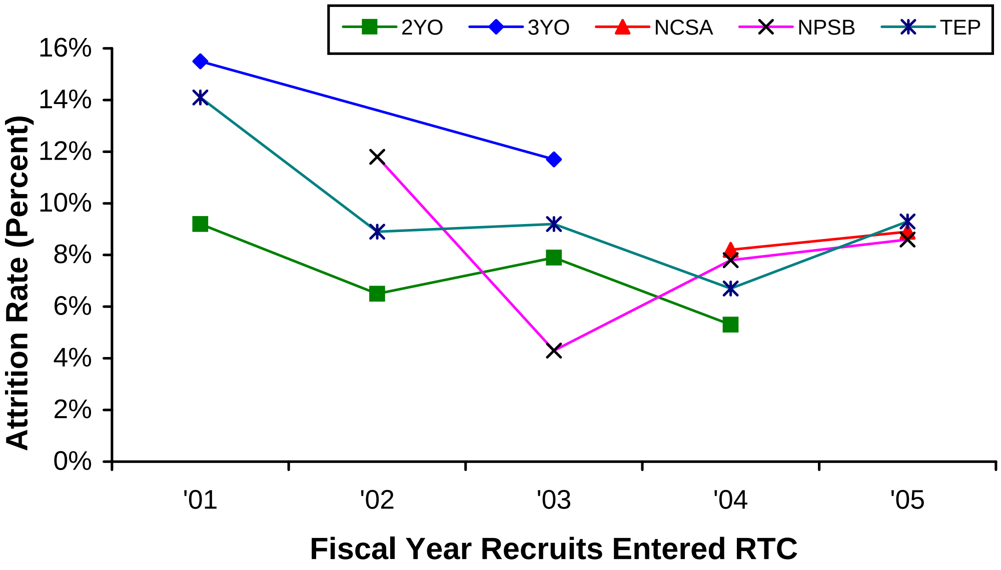
Figure 80 shows the trends in the various reserve component enlistment programs. As would be expected, the percentages of new recruits in these programs were very similar to the DEP percentages. TEP averaged 2.2 percent of recruits, with a maximum of 2.9 percent in FY2002, and a minimum of 1.9 percent in FY2005. The 2YO program never had more than 0.3 percent of total DEP accessions, and was discontinued in FY2004. The 3YO program also had very few members, never reaching more than 0.4 percent of new recruits before being discontinued in FY2003. The NPSB program was created in FY2002 and every year since has shown a steady increase in the number of recruits. The NCSA program was established in FY2004 and immediately gained priority in enlisted recruiting, jumping from 2.5 percent to 4.9 percent of all recruits in one year.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 80. Percent of RTC Recruits in Reserve Component Enlistment Programs by Year of Entry, Fiscal Years 2001-2005

RTC Attrition rates for Reserve programs also varied significantly between programs and fiscal years. As seen in Figure 81, The 3YO program had the highest attrition rates, when it was available, and the 2YO program had some of the lowest rates. The trend for the TEP program was very similar to the overall down-and-up fluctuating trend. Between FY2002 and FY2003, RTC attrition rates for the NPSB program dropped by 7.5 percentage points, and then increased again by 3.5 points the next year. Between FY2004 and FY2005, attrition rates for the three remaining Reserve programs were very similar, averaging only a 1.1 percentage point difference between the programs, over those two years.

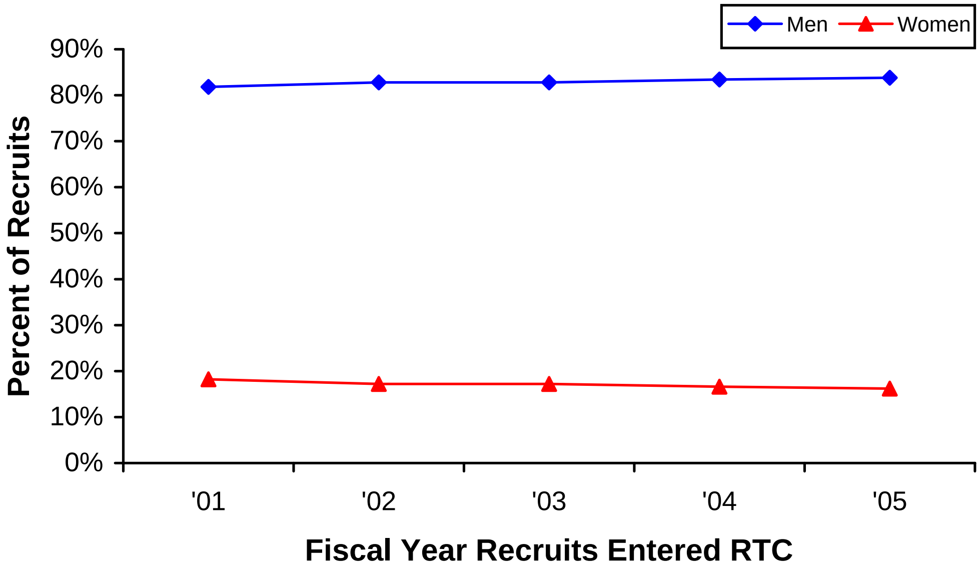


Source: Derived from PRIDE data files (CNRC, 2007).

Figure 81. Attrition Rates of RTC Recruits by Reserve Component Enlistment Program and Year of Entry, Fiscal Years 2001-2005

5. RTC Enlistment and Attrition Trends by Gender

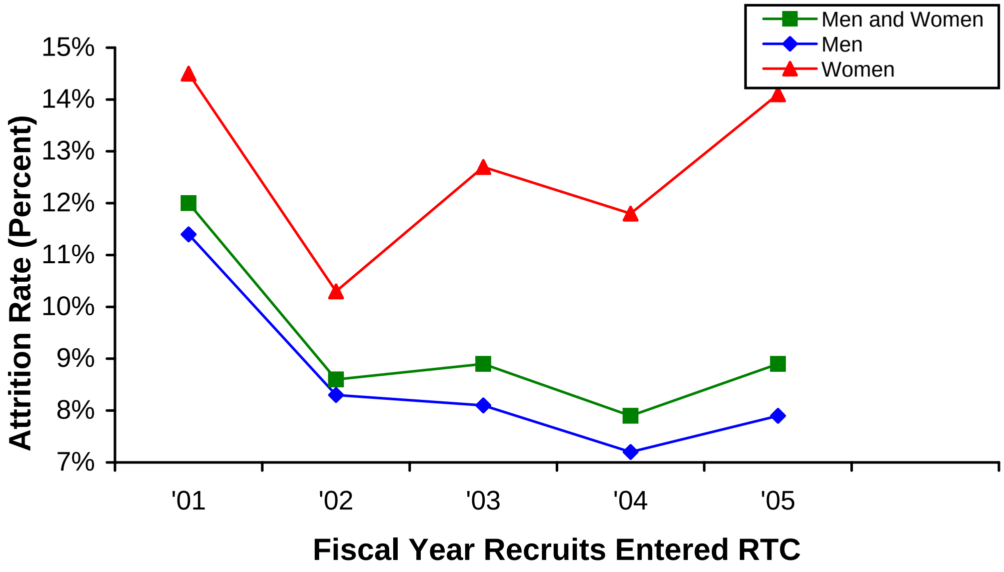
Of the over 213,000 men and women who attended the Navy’s Recruit Training Command between FY2001 and FY2005, just over 17 percent were women. Table 88 in Appendix D provides information on the number of men and women who shipped to RTC. Figure 82 shows that the percentage of new recruits who are women dropped from 18.2 percent to 16.2 percent over the course of this study.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 82. Percent of Recruits by Gender and Year of Entry, Fiscal Years 2001-2005

Over the entire period of this study, women had higher RTC attrition rates than men. Figure 83 shows the rates for women dropped from a high of 14.5 percent in FY2001, to 10.3 percent in FY2002. In FY2002, the difference in attrition rates between men and women reached a minimum of 2 percentage points. In FY2003, women's attrition rates jumped up again to 12.7 percent, and fell the next year to 11.8 percent. In FY2005, the attrition rate increased again to 14.1 percent, nearly as high as the rate in FY2001. Men's RTC attrition rates dropped from 11.4 percent in FY2001 to 7.9 percent in FY2005. The greatest gap in attrition rates between men and women occurred in FY2005 and was 6.2 percentage points.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 83. RTC Attrition Rates Among DEP Accessions by Gender and Fiscal Year

A previous RTC attrition study by Bownds found that married recruits are more likely to be discharged from the Navy than their single counterparts.[109] Table 31 shows the overall numbers of married and single recruits entering RTC. Single members overwhelmingly outnumbered the married members, with married members only accounting for 1.6 percent of total recruits over the period of this study. Women were less likely to be married than men by 1 percentage point.

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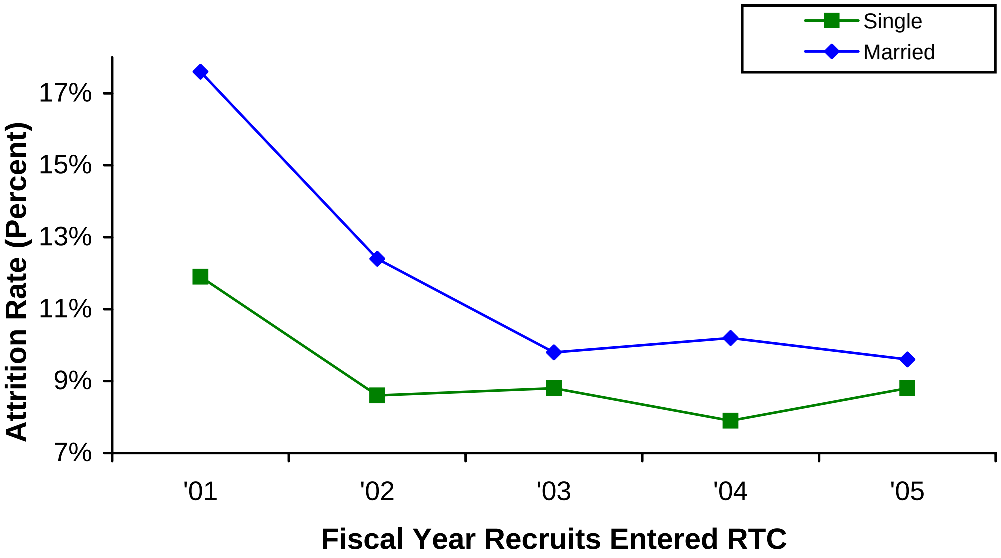
[109] Bownds, Updating the Navy’s Recruit Quality Matrix, 23.

Table 31. Single and Married Recruits by Gender

	Single		Married		Total	
	Number	Percent	Number	Percent	Number	Percent
Men	173,957	81.6	2,706	1.3	176,663	82.8
Women	35,853	16.8	734	0.3	36,587	17.2
Total	209,810	98.4	3,440	1.6	213,250	100

Source: Derived from PRIDE data files (CNRC, 2007).

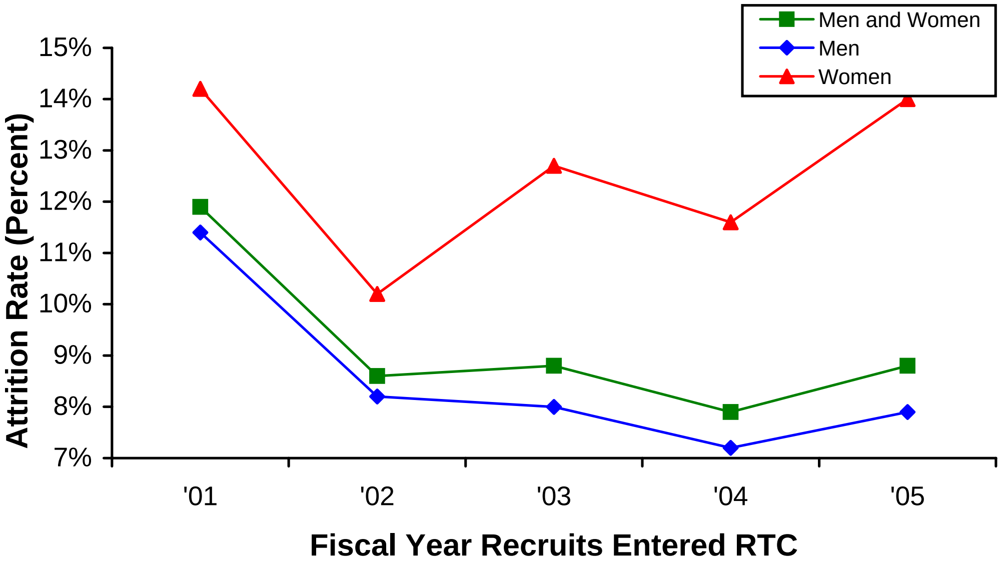
Since there were so few married members, the overall trends for single recruits, Figure 84, closely resemble the trends for all recruits, Figure 83. Married recruits showed higher attrition rates than single members, averaging 3.4 percentage points higher, over the course of the study. Between FY2001 and FY2003, the difference in rates fell from 5.8 to 1.0 points. In FY2004, the gap jumped to 2.3 points, and narrowed to 0.7 points in FY2005.



Source: Derived from PRIDE data files (CNRC, 2007).

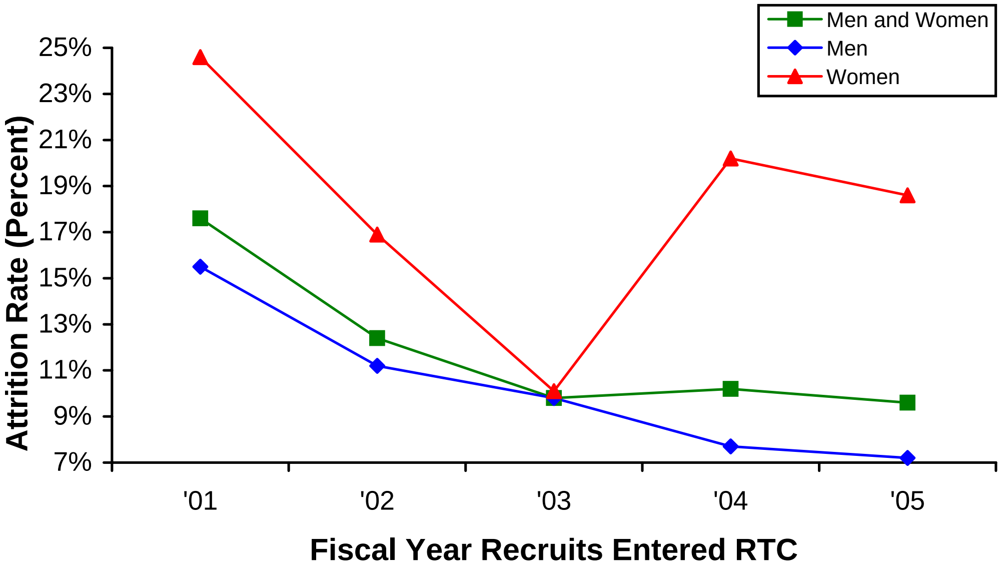
Figure 84. Attrition Rates of RTC Recruits by Marital Status and Year of Entry, Fiscal Years 2001-2005

Attrition rates for single men and women, Figure 85, are nearly identical to overall attrition rates for men and women, Figure 83, due to the vast majority of DEP members being single. Figure 86 shows that, for married women, attrition rates were typically much higher than those for married men. Rates for married women were at a maximum of 24.6 percent in FY2001 and then dropped to 10.1 percent in FY2003. Attrition rates then jumped up again to 20.2 percent in FY2004 and fell to 18.6 percent in FY2005. Attrition rates for married men gradually declined each year, reaching a minimum in FY2005 of 7.2 percent. Between FY2001 and FY2004, attrition rates for married men were higher than those for single men. In FY2005, the rates for married men dropped below the rates for single men.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 85. Attrition Rates for RTC Recruits Who Were Single by Gender and Year of Entry, Fiscal Year 2001-2005

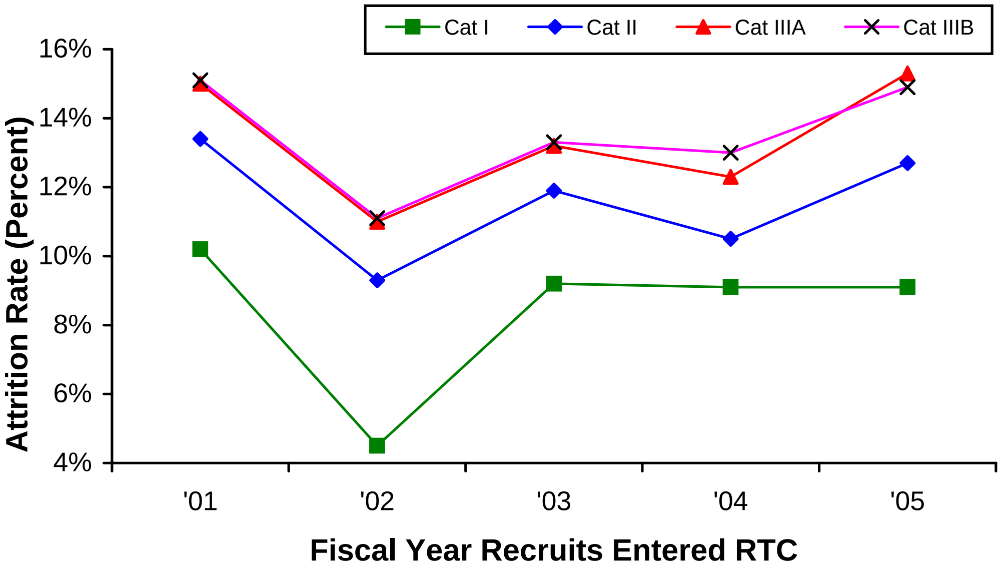


Source: Derived from PRIDE data files (CNRC, 2007).

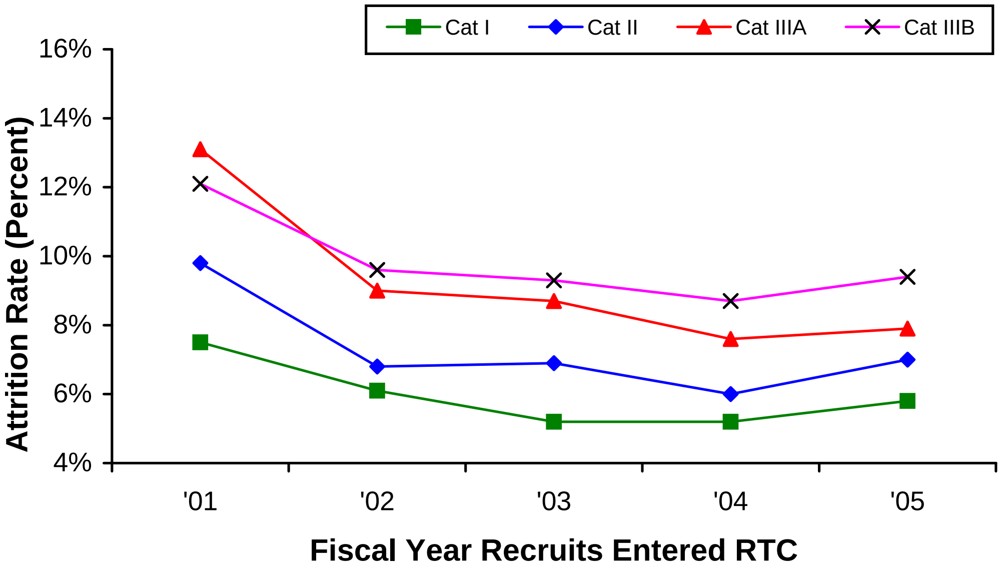
Figure 86. Attrition Rates for RTC Recruits Who Were Married by Gender and Year of Entry, Fiscal Year 2001-2005

RTC attrition trends for women based on AFQT category show widely varying trends. Figure 87 shows that, women in AFQT Category I had the lowest attrition rates in each fiscal year, declining from 10.2 percent in FY2001 to 4.5 percent in FY2002, and leveling off at 9.2 percent in FY2003 and beyond. Category II women showed the next higher attrition rates and fluctuated down-and-up each year. Categories IIIA and IIIB women had attrition rates nearly identical to each other each year.

Attrition rates for men based on AFQT categories did not show as much variation as did those of women, and were neatly separated by AFQT category. Category I men were at the low end, and Category IIIB men were at the high end, for every year but FY2001. Rates for each category dropped through FY2004 and increased slightly in FY2005.



— Women —

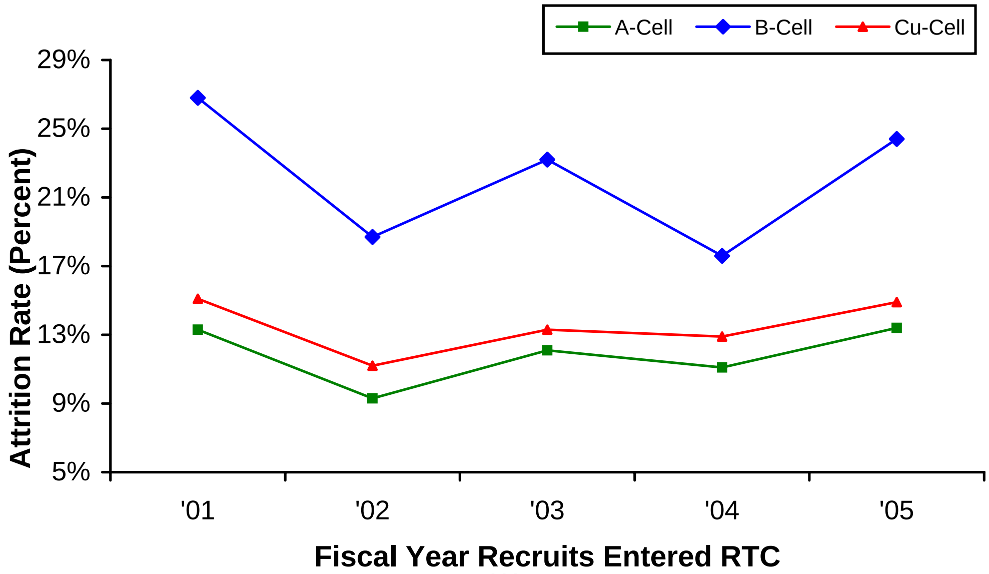


— Men —

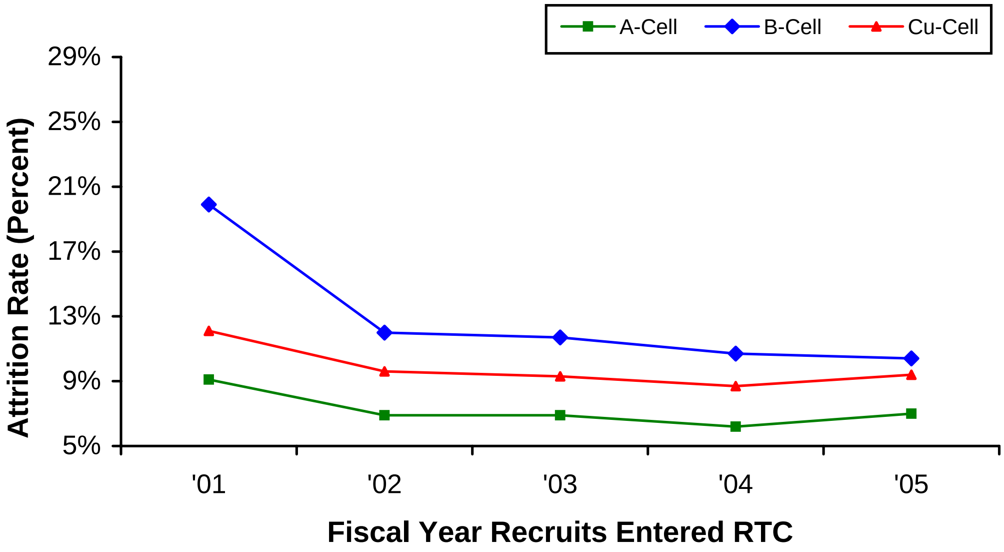
Source: Derived from PRIDE data files (CNRC, 2007).

Figure 87. Attrition Rates of RTC Recruits by Gender, AFQT Category, and Year of Entry, Fiscal Years 2001-2005

Men and women showed considerably different attrition trends among the Recruit Quality Matrix cells. For women, Figure 88 shows that A and Cu-Cell recruits had similar trends, with Cu-Cell women having higher rates. Attrition rates reached a minimum in FY2002 and then climbed again through FY2005. Attrition rates for B-Cell women were much more variable than A and Cu-Cell women, and significantly higher. The rates fluctuated down-and-up ever year with the higher rates in FY2001, FY2003, and FY2005.



— Women —



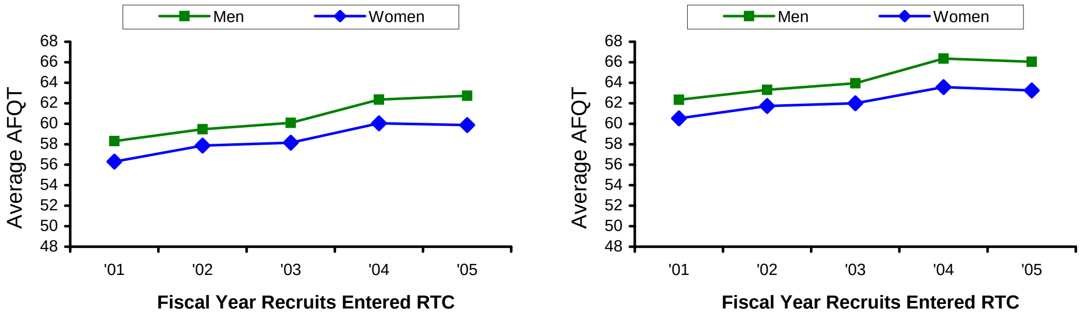
— Men —

Source: Derived from PRIDE data files (CNRC, 2007).

Figure 88. Attrition Rates of RTC Recruits by Gender, Recruit Quality Matrix Cell, and Year of Entry, Fiscal Years 2001-2005

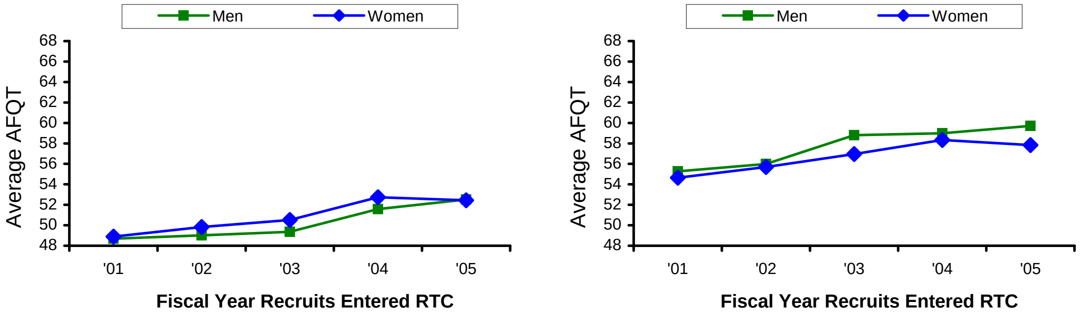
Figure 88 also shows that, attrition rates for men were distinctly separated by Recruit Quality Matrix cell. A-Cell men consistently had the lowest RTC attrition rates, with rates dropping from 9.1 percent in FY2001 to 7.0 percent in FY2005. The trend for Cu-Cell men was similar to A-Cell men averaging 2.8 percentage points higher. B-Cell men showed the greatest decrease in attrition rates, dropping from 19.9 percent in FY2001 to 10.4 percent in FY2005.

Figure 89 shows average AFQT scores of men and women by race and fiscal year. The general trends show men earn higher AFQT scores than women, and scores steadily increased between FY2001 and FY2005. White men and women consistently scored higher than other the other races. Black men and women averaged the lowest scores on the AFQT, with women scoring slightly higher than did men. Hispanic men and women scored higher than Black men and women, and showed a very narrow difference between the genders. API/NatAm men and women averaged the second highest scores over the course of the study. The “Other” category members showed the largest increase in average AFQT score, jumping six points between FY2003 and FY2004.



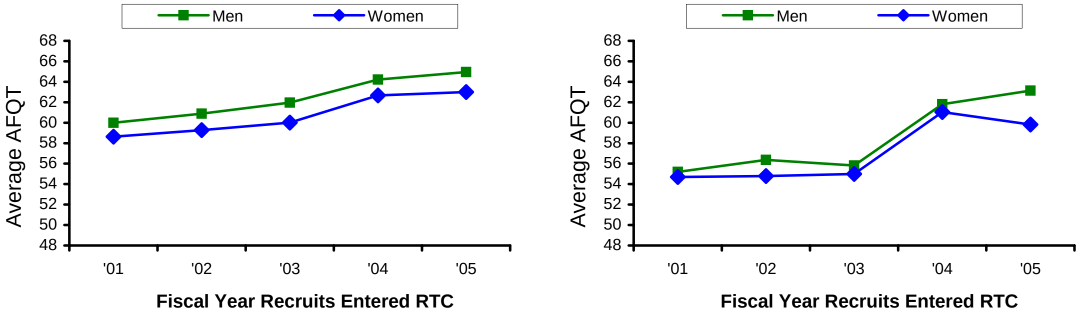
— Overall—

— White —



— Black —

— Hispanic —



— API/NatAm —

— Other—

Source: Derived from PRIDE data files (CNRC, 2007).

Figure 89. Average AFQT Score of DEP Recruits by Gender, Race/Ethnicity, and Year of Entry, Fiscal Years 2001-2005

6. RTC Attrition Analysis of Women by Rating

The greatest number of women joined the Navy as AN, SN, or HM. Nearly 40 percent of all women recruits were in these three ratings. Table 32 provides a complete listing of the number, and percentage, of women for all ratings.

Table 32. Number and Percent of Women Accessed into Each Rating (Descending Frequency, Traditional Ratings Bold)

Rating	Number	Percent	Rating	Number	Percent
AN	5,303	14.5	**AZ**	**270**	**0.7**
SN	4,825	13.2	EM	244	0.7
HM	**4,435**	**12.1**	EN	235	0.6
MA	1,539	4.2	**CTR**	**221**	**0.6**
AV	1,283	3.5	IC	213	0.6
CS	**1,235**	**3.4**	BU	193	0.5
IT	**1,147**	**3.1**	PR	158	0.4
NF	1,021	2.8	CTM	149	0.4
AECF	909	2.5	AS	142	0.4
SK	**900**	**2.5**	ABH	138	0.4
FN	710	1.9	ABE	126	0.3
OS	**704**	**1.9**	**AG**	**118**	**0.3**
AO	702	1.9	DC	115	0.3
CTI	**683**	**1.9**	GSM	111	0.3
PS	**637**	**1.7**	ABF	104	0.3
YN	**627**	**1.7**	HT	104	0.3
AIRC	497	1.4	EO	95	0.3
CTT	475	1.3	AME	70	0.2
AC	**465**	**1.3**	GSE	68	0.2
SH	**404**	**1.1**	**MU**	**63**	**0.2**
AD	394	1.1	UT	63	0.2
IS	**370**	**1.0**	CE	57	0.2
AIRR	339	0.9	CM	54	0.1
MM	315	0.9	**RP**	**53**	**0.1**
STG	294	0.8	**PC**	**46**	**0.1**
QM	290	0.8	SW	39	0.1
GM	287	0.8	EA	27	0.1
MC	**285**	**0.8**	MN	26	0.1
AM	279	0.8	MR	21	0.1

Source: Derived from PRIDE data files (CNRC, 2007).

RTC attrition rates varied widely between the ratings. The MN rating showed the greatest attrition rate, 23.1 percent, over the entire period of the study, while the MU rating had zero attrition. Attrition rates for traditional ratings averaged 11.6 percent while nontraditional ratings averaged 13.3 percent. Table 33 shows attrition rates for all ratings.

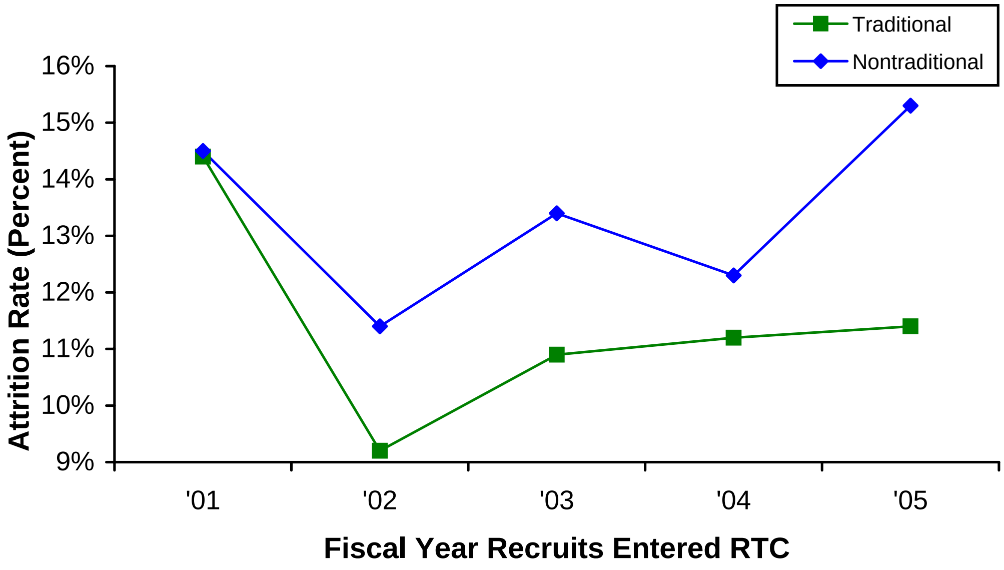
Table 33. Attrition Rates (Percent) of Women by Rating (Descending Order, Traditional Ratings Bold)

Rating	Percent	Rating	Percent
MN	23.1	**CS**	**13.7**
HT	18.3	**AG**	**13.6**
QM	17.6	**CTR**	**13.1**
UT	17.5	**PC**	**13.0**
EN	17.4	AECF	12.7
AME	17.1	CE	12.3
GSM	17.1	MA	12.3
BU	16.6	GM	12.2
PR	16.5	CTM	12.1
GSE	16.2	**YN**	**12.0**
STG	16.0	AV	11.9
SK	**15.4**	AM	11.8
SW	15.4	**AC**	**11.6**
FN	15.4	**MC**	**11.2**
AO	15.1	**HM**	**10.9**
RP	**15.1**	AD	10.9
IS	**14.9**	ABH	10.9
AS	14.8	**PS**	**10.4**
DC	14.8	AIRR	10.3
CTT	14.3	**IT**	**10.3**
MM	14.3	ABF	9.6
MR	14.3	**OS**	**9.1**
SN	14.2	ABE	8.7
SH	**14.1**	EO	8.4
IC	14.1	**CTI**	**7.9**
AZ	**14.1**	NF	7.8
AN	14.0	EA	7.4
EM	13.9	CM	5.6
AIRC	13.9	**MU**	**0.0**

Source: Derived from PRIDE data files (CNRC, 2007).

Traditional ratings had lower attrition rates each year and did not show as much variation as the nontraditional ratings. In FY2001 attrition rates for women in traditional and nontraditional ratings were nearly equal. As seen in

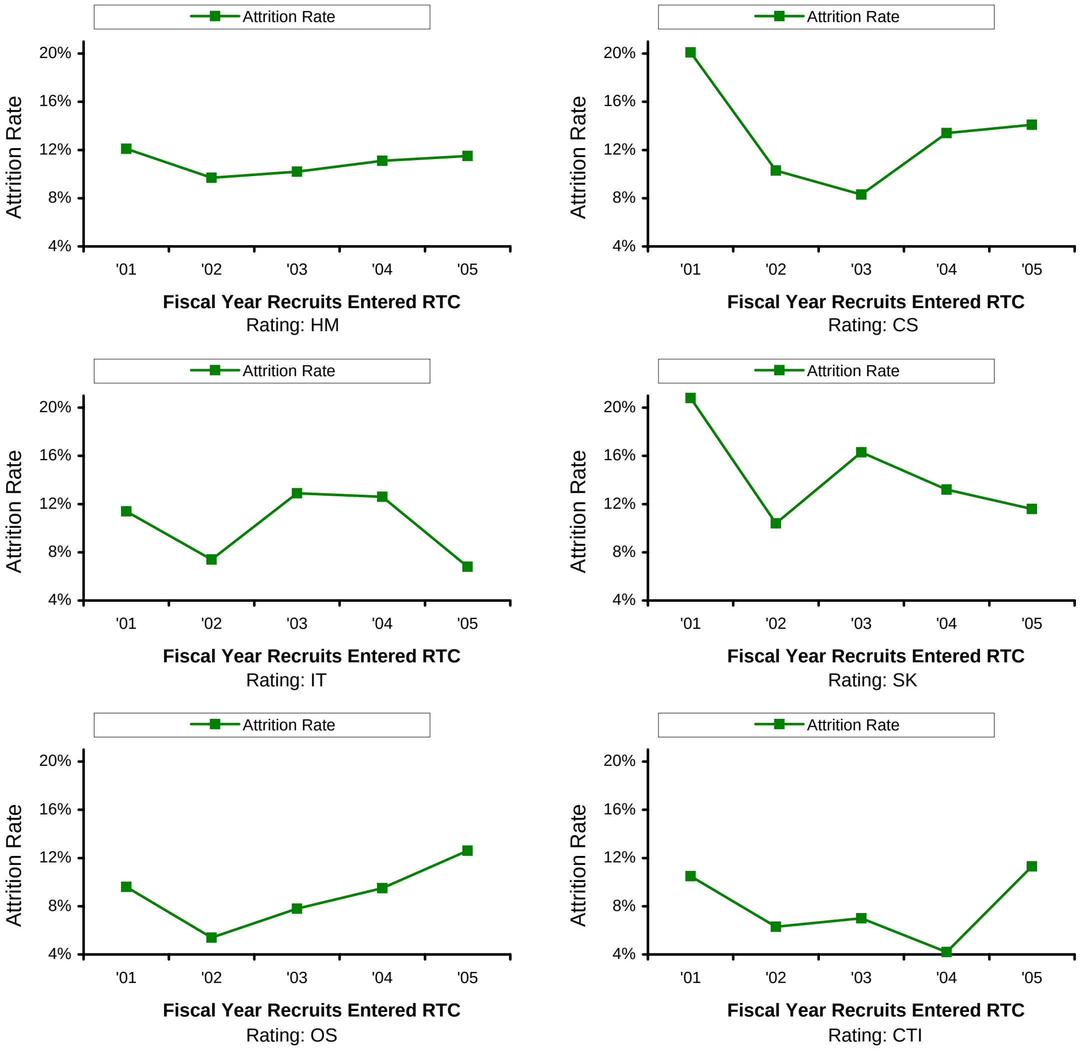
Figure 90, attrition rates for traditional ratings dropped significantly in FY2002, increased markedly again in FY2003, and slowly climbed through FY2005. Attrition rates for women in nontraditional ratings also dropped in FY2002 and increased again in FY2003. Rates then dropped again in FY2004 and reached a maximum of 15.2 percent in FY2005.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 90. Attrition Rate for Women by Job Type and Year of Entry, Fiscal Years 2001-2005

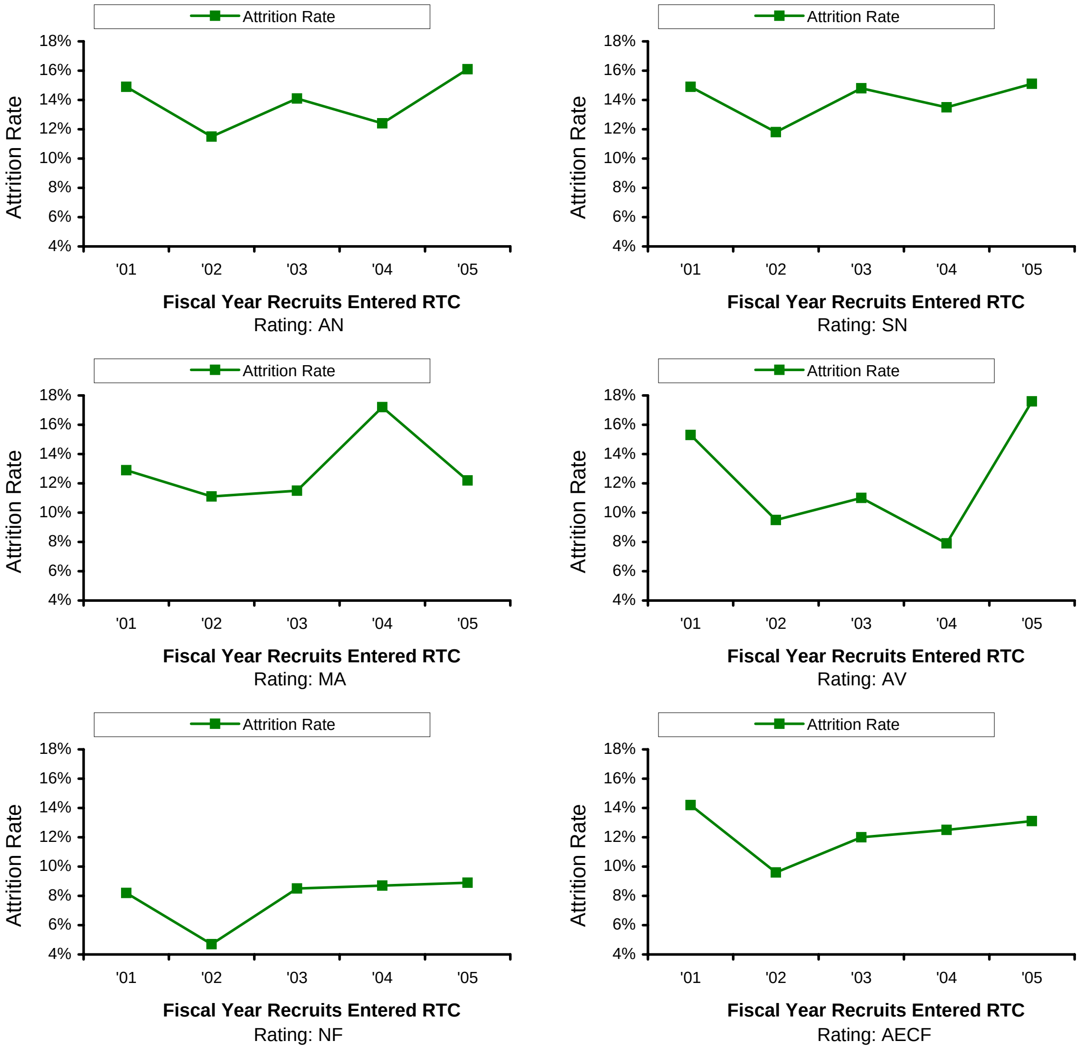
Attrition rates for women in specific DEP ratings vary widely. The trends for the six traditional ratings with the largest DEP populations (HM, CS, IT, SK, OS, and CTI) are shown in Figure 91. Each rating contained more than 680 women.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 91. RTC Attrition Rate for Women by Selected Traditional Rating and Year of Entry, Fiscal Years 2001-2005

The trends for the six nontraditional ratings with the largest DEP populations (AN, SN, MA, AV, NF, and AECF) are shown in Figure 92. Each rating contained more than 900 women. Trends for SN and AN closely resemble the overall nontraditional trend, while the trends for the other four ratings varied widely.



Source: Derived from PRIDE data files (CNRC, 2007).

Figure 92. RTC Attrition Rate for Women by Selected Nontraditional Rating and Year of Entry, Fiscal Years 2001-2005

7. Regression Analysis of RTC Attrition

Using maximum likelihood estimation (MLE), probit models were used to further analyze the relationships and test for statistical significance of the explanatory variables. Based on the previous trend analyses, variables were identified that could have a significant effect on attrition. Other control variables were added to improve the probit maximum likelihood estimation model specification. These variables include: age, gender, marital status, race/ethnicity, entry pay grade, time in DEP, enlistment bonus, fiscal year of commencing recruit training, and NRD. The complete variable list and descriptions of the data are presented in Appendix E. These variables were then used in specifying the separate models. Five models were specified based on the previous analyses. The general specification for the fully specified models one through four is as follows:

dep_atr = B0 + B1(enl_bonus) + B2(age_17) + B3(age_19) + B4(age_20) + B5(age_21) + B6(age_22) + B7(age_23p) + B8(married_fem) + B9(single_fem) + B10(married_mal) + B11(blk_only) + B12(hsp_only) + B13(api_only) + B14(multi) + B15(days_dep) + B16(days_dep_sq) + B17(afqt) + B18(SG) + B19(fiveYO) + B20(AEF) + B21(ATF) + B22(NF) +B23(GTEP) +B24(TEP) + B25(twoYO) + B26(threeYO) + B27(NCSA) + B28(NPSB) + B29(other_ep) + B30(E2) +B31(E3) + B32(FY1999) + B33(FY2000) + B34(FY2001) + B35(FY2002) + B36(FY2003) + B37(FY2004) + B38(FY2005) + B39 through B63 (NRDs) + .

The first model analyzes only the AFQT categories. The second model analyzes only education Tier groups. The second model analyzes only the current Recruit Quality Matrix cell structure. The fourth model analyzes only the individual education credential categories. This model is also used to analyze the enlistment programs. The fifth model is estimated on a sample of female recruits only and analyzes DEP attrition with respect to women and their enlistment ratings.

In models 1-4 the base group for the regression was a single, white, 18-year old male, entering as an E1 with no enlistment bonus in the GENDET program in FY2001 from NRD Atlanta. The base group also had an average 60 AFQT score and was in DEP 129 days. Model five is similar to models one through four, but with only women included the sample. The base group for the fifth model was a single, white, 18-year old female high school graduate, entering as an E1 with no enlistment bonus in the GENDET program in FY2001 from NRD Atlanta.

Prior to estimating the full regression on each model, a preliminary regression was conducted using only the specific focus variables to determine the predicting power of the primary focus variables (Tiers, AFQT Categories, Recruit Quality Matrix cells, education credentials, enlistment programs, and ratings.

a. Regression Analysis of AFQT Categories

The preliminary regression on AFQT categories used Category II for the base group. The effects of each AFQT category on RTC attrition were statistically significant at the 1-percent level or better. Table 34 shows Category I DEP members are predicted to have a lower likelihood of discharge from DEP, and Categories IIIA and IIIB members have a greater likelihood of discharge (compared to Category II recruits). These results support the previous trend analysis.

Table 34. Preliminary RTC Attrition Probit Model, AFQT Categories

Variables	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
cat1	-0.1386	0.0196	-7.06	0.000	***	-0.0213	0.054
cat3a	0.1361	0.0098	13.92	0.000	***	0.0236	0.267
cat3b	0.1564	0.0092	16.99	0.000	***	0.0270	0.333
_cons	-1.4029	0.0067	-209.07	0.000	***		

Probit regression. Dependent variable is "attrited at RTC"
*** Indicates coefficient is significant at 1-percent level or better
AFQT Category II is omitted category
Number of obs = 213,250 Pseudo R^2 = 0.0038
Source: Derived from PRIDE data files (CNRC, 2007).

The results of the fully specified model are available in Table 97, Appendix F. The results for the control variables were generally as expected, with a few exceptions. With all other factors held constant, the variables that resulted in greater attrition rates were: being 19 years old and older, being a single or married woman, being a married man, and being from NRDs Dallas, Michigan, Nashville, New Orleans, or Ohio. The variables that resulted in lower attrition rates were: receiving an enlistment bonus, being 17 years old, being Black, Hispanic, API/NatAm or multi racial, enlisting as an E2 or E3, enlisting in the SG, 5YO, ATF, NF, GTEP, or NPSB programs, and being from NRDs Los Angeles, Miami, New England, New York, Phoenix, Pittsburgh, Portland, San Diego, or Seattle.

Additionally, when all demographic variables are included, the estimates of the primary independent variables (AFQT categories) all were significant at the 1-percent level and were as predicted. AFQT Category I predicted a lower attrition rate and Categories IIIA and IIIB predicted higher rates (compared to Category II). Table 35 shows the regression results for the primary variables. Interpreting Table 35, based on partial effects of the regression, being an AFQT Category I recruit results in a 1.27 percentage point lower probability of attrition than a Category II recruit, holding all other variables constant. A recruit being in AFQT Category IIIA or IIIB results in the increase of the probability of not completing RTC by 1.85 and 2.18 percentage points, respectively. The model pseudo R-Squared value increased from 0.0038 to 0.0286 indicating the additional independent variables added to the predicting power of the model.

Table 35. Full RTC Attrition Probit Model, AFQT Categories

Variables	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
cat1	-0.0839	0.0211	-3.97	0.000	***	-0.0127	0.054
cat3a	0.1122	0.0105	10.68	0.000	***	0.0185	0.267
cat3b	0.1328	0.0111	11.96	0.000	***	0.0218	0.333

Probit regression. Dependent variable is "attrited at RTC"

*** Indicates coefficient is significant at 1-percent level or better

AFQT Category II is omitted category

Number of obs = 213,250 Pseudo R^2 = 0.0209

Source: Derived from PRIDE data files (CNRC, 2007).

b. Regression Analysis of Education Tier Groups

The preliminary regression on education Tier groups used Tier I recruits for the base group. The effects of both Tier II and Tier III recruits on RTC attrition were statistically significant at the 1-percent level. Table 36 shows both Tier II and Tier III recruits were predicted to have a greater likelihood of discharge from RTC than Tier I recruits. Partial effects show a 5.82 and 6.06 percentage point increase in the probability of attrition, respectively. These results were similar to the previous trend analysis.

Table 36. Preliminary RTC Attrition Probit Model, Education Tier Groups

Variables	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
tier2	0.2943	0.0166	17.70	0.000***	0.0582	0.043
tier3	0.3033	0.0205	14.82	0.000***	0.0606	0.027
_cons	-1.3417	0.0040	-338.91	0.000***		

Probit regression. Dependent variable is "attrited at RTC"
*** Indicates coefficient is significant at 1-percent level or better
Tier I is omitted category
Number of obs = 213,250 Pseudo R^2 = 0.0037
Source: Derived from PRIDE data files (CNRC, 2007).

The results from the full specification are available in Table 98, Appendix F. The results for the control variables were similar to the previous full regression on AFQT categories. However, being a married man no longer shows a significantly higher rate of attrition, and being in the SG or ATF programs no longer show a lower probability of discharge from RTC.

The estimates of the primary independent variables (education Tier groups) did not differ from the preliminary regression. Both Tier II and Tier III were still significant at the 1-percent level and showed higher attrition rates than Tier I recruits. Table 37 shows the regression results for the primary variables. Based on partial effects of the regression, being a Tier II DEP member resulted in a 5.44 percentage point higher probability of attrition and Tier III members showed a 5.7 point higher probability. The pseudo R-squared statistic for this regression was 0.0323, which was greater than the previous model, suggesting a slightly better fit of the model.

Table 37. Final RTC Attrition Probit Model Results, Education Tier Groups

Variables	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
tier2	0.2852	0.0171	16.65	0.000***	0.0544	0.043
tier3	0.2956	0.0217	13.59	0.000***	0.0570	0.027

Probit regression. Dependent variable is "attrited at RTC"
*** Indicates coefficient is significant at 1-percent level or better
Tier I is omitted category
Number of obs = 213,250 Pseudo R^2 = 0.0323
Source: Derived from PRIDE data files (CNRC, 2007).

c. Regression Analysis of Recruit Quality Matrix Cells

The preliminary regression on Recruit Quality Matrix Cells used A-Cell members for the base group. The effects of each cell on DEP attrition were statistically significant at the 1-percent level or better. Table 38 shows that both B-Cell and Cu-Cell recruits were predicted to have a greater likelihood of discharge from RTC than an A-Cell recruit. These results support the previous trend analysis. Comparing pseudo R-squared values from the AFQT category and Education Tier preliminary regressions (0.0038 and 0.0037) and the Recruit Quality Matrix preliminary regression (0.0064), the Recruit Quality Matrix shows greater predicting power.

Table 38. Preliminary RTC Attrition Probit Model, Recruit Quality Matrix Cells

Variables	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
B_Cell	0.3593	0.0136	26.44	0.000***	0.0725	0.070
Cu_Cell	0.1535	0.0081	18.90	0.000***	0.0264	0.331
_cons	-1.4002	0.0051	-275.06	0.000***		

Probit regression. Dependent variable is "attrited at RTC"
*** Indicates coefficient is significant at 1-percent level or better
A-Cell is omitted category
Number of obs = 213,250 Pseudo R^2 = 0.0064
Source: Derived from PRIDE data files (CNRC, 2007).

The results of the full regression are available in Table 99, Appendix F. The results for the control variables were similar to the previous full regression. Most control variables showed the same effect and significance on RTC attrition. The only differences were with the SG, AEF, and ATF programs. All three programs now predict lower attrition compared to the GENDET program.

The estimates of the primary independent variables (Recruit Quality Matrix Cells) only differed slightly from the preliminary regression. Table 39 shows the regression results for the primary variables. The signs and significances of the B-Cell and Cu-Cell recruits were the same, but the partial effects were lower for each cell. Based on partial effects of the regression, being a B-Cell or Cu-Cell recruit results in a 6.15 or 2.09 percentage point higher probability of attrition, compared to an A-Cell recruit, holding all other variables constant. The pseudo R-squared was 0.0311, showing this model has less predicting power than the Education Tier group model.

Table 39. Final RTC Attrition Probit Model Results, Recruit Quality Matrix Cells

Variables	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
B_Cell	0.3234	0.0145	22.28	0.000***	0.0615	0.070
Cu_Cell	0.1278	0.0097	13.18	0.000***	0.0209	0.331

Probit regression. Dependent variable is "attrited at RTC"
*** Indicates coefficient is significant at 1-percent level or better
A-Cell is omitted category
Number of obs = 213,250 Pseudo R^2 = 0.0311
Source: Derived from PRIDE data files (CNRC, 2007).

d. Regression Analysis of Education Credential Categories

Table 40 shows the preliminary regression results on education credential categories. This model used high school graduates for the base group. Adult high school graduates, GED holders with a semester of college or Job Corps certificate, home school graduates, GED holders, correspondence school graduates, NGYCP participants, and dropouts all showed higher recruit attrition rates, which were significant at the 10-percent level or better. Bachelor’s and Associate’s Degree holders showed lower attrition rates, which were significant at the 5-percent level or better. The results for recruits who earned a Master’s Degree, failed a high school exit exam, earned other non-traditional education credentials, and had a certificate of attendance showed RTC attrition rates that were not statistically different than traditional high school graduates. This model’s pseudo R-squared value, 0.0066, was higher than the Recruit Quality Matrix model, suggesting a better ability to predict attrition.

Table 40. Preliminary RTC Attrition Probit Model, Education Credentials

Variables	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
mast_deg_I	-0.3231	0.2085	-1.55	0.121		-0.0430	0.001
bach_deg_I	-0.2186	0.0338	-6.46	0.000	***	-0.0314	0.017
assoc_deg_I	-0.0984	0.0421	-2.34	0.019	**	-0.0153	0.009
adult_hs_I	0.2297	0.0220	10.45	0.000	***	0.0438	0.026
sem_college_I	0.2388	0.0184	12.99	0.000	***	0.0456	0.037
fail_exit_I	0.1284	0.0960	1.34	0.181		0.0232	0.001
home_school_I	0.3427	0.0509	6.74	0.000	***	0.0703	0.004
GED_II	0.3183	0.0176	18.13	0.000	***	0.0636	0.038
cert_attnd_II	-0.0242	0.2328	-0.10	0.917		-0.0040	0.000
other_non_trad_II	0.0236	0.2370	0.10	0.921		0.0040	0.000
corr_school_II	0.1935	0.1130	1.71	0.087	*	0.0364	0.001
ngycp_II	0.2199	0.0443	4.96	0.000	***	0.0419	0.006
no_cred_III	0.3419	0.0205	16.69	0.000	***	0.0695	0.027
_cons	-1.3588	0.0042	-321.76	0.000	***		

Probit regression. Dependent variable is "attrited at RTC"
Education Tier denoted by Roman numeral
* Indicates coefficient is significant at 10-percent level or better
** Indicates coefficient is significant at 5-percent level or better
*** Indicates coefficient is significant at 1-percent level or better
Traditional high school graduate is omitted category
Number of obs = 213,250 Pseudo R^2 = 0.0066
Source: Derived from PRIDE data files (CNRC, 2007).

The results of the full regression are available in Table 100, Appendix F. The results for the control variables were as expected based on the previous full regressions. Most control variables showed similar effects and significances on DEP attrition, only the SG, AEF, and ATF programs are no longer statistically significant. NRD Houston now predicts a higher RTC attrition rate and NRD Jacksonville predicts a lower attrition rate.

Table 41 shows the regression results for the primary variables (education credentials) in the full model were very similar to the preliminary regression results.

Based on partial effects of the regression, GED holders and dropouts showed the greatest probabilities for discharge, with the probability of attrition being 6.01 and 7.03 percentage points higher, respectively, than high school graduates. Adult high school graduates, GED holders with a semester of college or Job Corps certificate, home school graduates, and NGYCP participants also showed much higher probabilities of attrition. Bachelor’s degree holders had the largest negative effect on attrition, decreasing the probability of discharge by 2.63 percentage points (compared to high school graduates). Associate’s degree holders also showed negative effects, but not as large as Bachelor’s degree holders. The pseudo R-squared value for this model was 0.0342, which was larger than any previous model, suggesting a much better fit.

Table 41. Final RTC Attrition Probit Model Results, Education Credentials

Variables	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
mast_deg_I	-0.3218	0.2130	-1.51	0.131		-0.0405	0.001
bach_deg_I	-0.1892	0.0362	-5.23	0.000	***	-0.0263	0.017
assoc_deg_I	-0.0946	0.0435	-2.17	0.030	**	-0.0140	0.009
adult_hs_I	0.2180	0.0225	9.67	0.000	***	0.0394	0.026
sem_college_I	0.1649	0.0189	8.71	0.000	***	0.0288	0.037
fail_exit_I	0.0552	0.0973	0.57	0.570		0.0090	0.001
home_school_I	0.2534	0.0520	4.87	0.000	***	0.0471	0.004
GED_II	0.3151	0.0183	17.26	0.000	***	0.0601	0.038
cert_attnd_II	0.0570	0.2345	0.24	0.808		0.0093	0.000
other_non_trad_II	0.0156	0.2368	0.07	0.947		0.0025	0.000
corr_school_II	0.2273	0.1144	1.99	0.047	**	0.0416	0.001
ngycp_II	0.1755	0.0452	3.88	0.000	***	0.0311	0.006
no_cred_III	0.3584	0.0218	16.40	0.000	***	0.0703	0.027

Probit regression. Dependent variable is "attrited at RTC"
Education Tier denoted by Roman numeral
* Indicates coefficient is significant at 10-percent level or better
** Indicates coefficient is significant at 5-percent level or better
*** Indicates coefficient is significant at 1-percent level or better
Traditional high school graduate is omitted category
Number of obs = 213,250 Pseudo R^2 = 0.0342
Source: Derived from PRIDE data files (CNRC, 2007).

e. Regression Analysis of Enlistment Programs

Table 42 shows the preliminary regression results on enlistment programs. This model used the GENDET program as the base group. Each enlistment program was significant at at least the 10-percent level and all programs showed lower attrition probabilities (except the 3YO program) than GENDETs. The Nuclear Field program had the largest differential, with the probability being 5.18 points lower than GENDETs.

Table 42. Preliminary RTC Attrition Probit Model, Enlistment Programs

Variables	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
SG	-0.0890	0.0096	-9.30	0.000	***	-0.0146	0.396
fiveYO	-0.1294	0.0123	-10.55	0.000	***	-0.0203	0.156
AEF	-0.1436	0.0192	-7.47	0.000	***	-0.0219	0.048
ATF	-0.1696	0.0314	-5.40	0.000	***	-0.0253	0.017
NF	-0.3955	0.0204	-19.43	0.000	***	-0.0518	0.057
GTEP	-0.1052	0.0203	-5.17	0.000	***	-0.0164	0.040
twoYO	-0.2107	0.0935	-2.25	0.024	**	-0.0304	0.002
threeYO	0.1617	0.0920	1.76	0.079	*	0.0299	0.001
NCSA	-0.1392	0.0342	-4.07	0.000	***	-0.0212	0.013
NPSB	-0.1785	0.0655	-2.73	0.006	***	-0.0264	0.004
TEP	-0.0629	0.0259	-2.43	0.015	**	-0.0101	0.022
other_ep	-0.1101	0.0359	-3.07	0.002	***	-0.0171	0.012
_cons	-1.2248	0.0075	-163.99	0.000	***		

Probit regression. Dependent variable is "attrited at RTC"
* Indicates coefficient is significant at 10-percent level or better
** Indicates coefficient is significant at 5-percent level or better
*** Indicates coefficient is significant at 1-percent level or better
GENDET is omitted category
Number of obs = 213,250 Pseudo R^2 = 0.0036
Source: Derived from PRIDE data files (CNRC, 2007).

The results of the full regression are available in Table 100, Appendix F. This model used the same regression as the education credential model, so control variable were exactly the same. Table 43 shows the regression results for the primary independent variables (enlistment programs). The results were quite different than the preliminary regression results. The probability of being discharged at RTC based on enlistment program was lowered by being in the fiveYO, NF, GTEP, and NPSB programs. The probability of attrition for all other programs was not statistically different than that of the GENDET program. The Nuclear Field program lowered the probability of attrition by 1.32 percentage points, compared to the GENDET program, when holding all other variables constant, and the NPSB program reduced attrition by 3.0 points.

Table 43. Final RTC Attrition Probit Model Results, Enlistment Programs

Variables	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
SG	-0.0086	0.0109	-0.79	0.427	-0.0014	0.396
fiveYO	-0.0262	0.0136	-1.92	0.054*	-0.0041	0.156
AEF	0.0246	0.0221	1.12	0.264	0.0039	0.048
ATF	-0.0300	0.0332	-0.90	0.366	-0.0046	0.017
NF	-0.0882	0.0243	-3.63	0.000***	-0.0132	0.057
GTEP	-0.0527	0.0212	-2.49	0.013**	-0.0080	0.040
TEP	-0.0110	0.0270	-0.41	0.683	-0.0017	0.022
twoYO	-0.0863	0.0966	-0.89	0.371	-0.0128	0.002
threeYO	0.0295	0.0944	0.31	0.755	0.0047	0.001
NCSA	0.0209	0.0357	0.58	0.559	0.0033	0.013
NPSB	-0.2222	0.0671	-3.31	0.001***	-0.0300	0.004
other_ep	-0.0403	0.0338	-1.19	0.233	-0.0062	0.014

Probit regression. Dependent variable is "attrited at RTC"
* Indicates coefficient is significant at 10-percent level or better
GENDET is omitted category
Number of obs = 213,250 Pseudo R^2 = 0.0342
Source: Derived from PRIDE data files (CNRC, 2007).

f. Regression Analysis of Women and Traditional Occupations

The preliminary regression on traditional jobs for the sample of women only used nontraditional jobs as the base group. Traditional female jobs was significant at the 1-percent level and showed lower attrition probabilities. Table 44 shows the preliminary regression results. The pseudo R-squared for this preliminary model was 0.0007, which shows this model has very little predicting power.

Table 44. Preliminary RTC Attrition Probit Model, Women and Ratings

Variables	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
trad_fem	-0.0807	0.0178	-4.53	0.000	***	-0.0166	0.344
_cons	-1.1132	0.0102	-109.07	0.000	***		

Probit regression. Dependent variable is "attrited at RTC"
*** Indicates coefficient is significant at 1-percent level or better
Nontraditional female jobs is omitted category
Number of obs = 36,587 Pseudo R^2 = 0.0007
Source: Derived from PRIDE data files (CNRC, 2007).

The results of the full intermediate regression are available in Table 101, Appendix F. The results for the control variables, in the sample of females, were quite different than the previous regressions on the entire RTC sample. The following variables resulted in positive effects on discharge from RTC: age_23p, married, adult_hs, sem_college, home_school, GED, no_cred, FY2005, and being from NRD Dallas, Houston, Miami, Michigan, Nashville, New Orleans, Ohio, or San Antonio. Variables resulting in negative effects on RTC attrition were: age_17, blk_only, hsp_only, api_only, multi, days_dep, afqt, E2, E3, bach_deg, assoc_deg, FY2002, FY2004, and being from NRD LA, New England, New York, Pittsburgh, or Seattle.

In the full model, the estimate of the primary independent variable (traditional female jobs) was quite different than the preliminary regression result. Table 45 shows that women with traditional female jobs, had an insignificant effect on attrition, when control variables are included. This is an interesting outcome compared to the DEP attrition model, where traditional female jobs was significant. Psuedo R-squared for this model was much larger than the preliminary regression, showing the control variables enhanced the model’s fit more than having a traditional female job.

Table 45. Intermediate RTC Attrition Probit Model Results, Women and Tradition Occupations

Variables	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
trad_fem	-0.0247	0.0192	-1.29	0.198	-0.0049	0.344

Probit regression. Dependent variable is "attrited at RTC"
Nontraditional female jobs is omitted category
Number of obs = 36,584 Pseudo R^2 = 0.0323
Source: Derived from PRIDE data files (CNRC, 2007).

The full model results are available in Table 102, Appendix F. The results for the control variables were very similar to the intermediate regression on the female population. The only differences were women who are 17 years old or enlisted as an E3 are no longer significant.

The estimate of the primary independent variables (all traditional ratings) supported the intermediate regression result. Nontraditional female ratings, as an aggregate, was used as the base rating group for this regression. Table 46 shows that, for women, only the CTI, HM, and OS ratings predicted lower attrition rates, compared to nontraditional ratings. Women in the SK rating were predicted to have higher attrition rates, compared to nontraditional ratings. The MU rating was dropped from the model because all women in the MU rating graduated from RTC. The pseudo R-squared statistic for the full model increased to 0.0334 showing the predicting power of this model was slightly better than the intermediate model.

Table 46. Final RTC Attrition Probit Model Results, Women and Traditional Ratings

Variables	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
AC	-0.0783	0.0779	-1.01	0.315	-0.0149	0.013
AG	0.0250	0.1487	0.17	0.867	0.0050	0.003
AZ	0.0321	0.0971	0.33	0.741	0.0065	0.007
CS	0.0108	0.0449	0.24	0.810	0.0022	0.038
CTI	-0.1868	0.0738	-2.53	0.011**	-0.0333	0.019
CTR	0.1302	0.1095	1.19	0.234	0.0279	0.006
HM	-0.0577	0.0275	-2.09	0.036**	-0.0112	0.133
IS	0.1343	0.0829	1.62	0.105	0.0288	0.010
IT	-0.0665	0.0527	-1.26	0.207	-0.0127	0.031
MC	-0.0480	0.1003	-0.48	0.632	-0.0093	0.008
OS	-0.1561	0.0624	-2.50	0.012**	-0.0284	0.023
PC	-0.0763	0.2410	-0.32	0.752	-0.0145	0.001
PS	-0.0864	0.0699	-1.24	0.216	-0.0163	0.017
RP	0.0718	0.2096	0.34	0.732	0.0149	0.001
SH	0.0515	0.0798	0.65	0.519	0.0105	0.011
SK	0.1366	0.0535	2.55	0.011**	0.0293	0.025
YN	-0.0304	0.0612	-0.50	0.619	-0.0059	0.021

Probit regression. Dependent variable is "attrited at RTC"
** Indicates coefficient is significant at 5-percent level or better
Nontraditional female jobs is omitted category
MU dropped from regression due to zero RTC attrites.
Number of obs = 36,521 Pseudo R^2 = 0.0334
Source: Derived from PRIDE data files (CNRC, 2007).

8. Summary of Results from RTC Data Analysis

- The number of recruits trained at RTC has declined from over 51,000 in FY2001 to just under 38,000 in FY2005.
- In general, as average time in DEP increased, RTC attrition decreased.
- Attrition rates at RTC are distinctly different by Recruit Quality Matrix cell, with A-Cell recruits having the lowest rates (8.1 percent) and B-Cell recruits having the highest rates (13.4 percent).
- Attrition rates by AFQT category were noticeably different, with AFQT Category I recruits at the

low end (6.2 percent), and Category IIIB recruits at the high end (10.4 percent).

- Generally, recruits with more formal education tended to have a lower attrition rate.
- Education Tier I recruits who were adult education graduates, GED-holders who completed a semester of college or a Job Corps program, and home school graduates had attrition rates more in line with Tier II recruits than with other recruits in Tier I.
- Recruits designated for the fiveYO, NF, GTEP, and NPSB programs tended to have attrition rates that were significantly lower than those of GENDETs; no other program-specific differences were statistically significant.
- Women were much more likely to be discharged from RTC (12.7 percent) than were men (8.6 percent).
- Married men and women were more likely to be discharged from RTC (11.9 percent) compared with their unmarried counterparts (9.2 percent).
- Women in traditional ratings, as a whole, did not tend to have lower attrition rates compared with their counterparts in nontraditional ratings; only CTI, HM, and OS ratings showed lower attrition rates, compared with nontraditional ratings as a whole.
- Regression results on the entire RTC sample supported the results from the trend analyses. With all other factors held constant, the variables that resulted in *higher* attrition rates were: being 19 years old or older, being a single or married woman, being in DEP for a longer time, having an adult education diploma, having a GED with a semester of college, being a home school graduate, having a GED, completing correspondence courses to earn a diploma, completing the National Guard Youth ChalleNGe Program, or having no credential, and joining the Navy from NRDs Dallas, Houston, Michigan, Nashville, New Orleans, or Ohio.

- The variables that resulted in *lower* attrition rates were: being 17-years old, being black, Hispanic, API/NatAm, or multi racial, enlisting as an E2 or E3, having a Bachelor’s or Associate’s degree, enlisting in the fiveYO, NF, GTEP, or NPSB programs, shipping to RTC in every fiscal year between 2002 and 2005, enlisting from NRDs Jacksonville, Los Angeles, Miami, New England, New York, Philadelphia, Phoenix, Pittsburgh, Portland, Richmond, San Diego, or Seattle.

V. RTC ATTRITION PREDICTORS

The Recruit Quality Matrix was developed using AFQT scores and education credentials based on first-term attrition rates. As seen in Chapters III and IV, many other factors affect attrition rates. It would not be appropriate to utilize enlistment standards that discriminate on the basis of race or gender, but revising the standards based on age could be appropriate. The Navy currently uses age as a factor when enlisting Tier II and Tier III recruits, so it may be appropriate to extend the age requirements to Tier I recruits as well.[110]

To validate education credentials, AFQT scores, and age as predictors of RTC completion, a new model was developed so that only these factors are used to predict attrition. The theoretical model is as follows:

attrflag = B0 + B1(afqt) + B2(age) + B3(mast_deg_I) + B4(bach_deg_I) + B5(assoc_deg_I) + B6(fail_exit_I) + B7(adult_hs_I) + B8(sem_college_I) + B9(home_school_I) + B10(GED_II) + B11(other_non_trad_II) + B12(corr_school_II) + B13(cert_attnd_II) + B14(ngycp_II) + B15(no_cred_III) + .[111]

The inclusion of other control variables such as NRD, enlistment program, race, and gender would reduce the partial effects of AFQT, age, and education credential. If a more advanced screening tool were developed, based on all predictors of attrition, the other important control variables would be included in the model to achieve the most accurate partial effects of each independent variable. By not including other control variables in this model, the effects of these variables are seen in the included variables.

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[110] The High Performance Predictor Profile (HP3) screen used by CNRC for Tier II and Tier III applicants takes into consideration age, number of years of completed education, and AFQT score. Similar screening methods could be used for all education credentials.

[111] The base case was a traditional high school graduate. See Table 97 in Appendix E for variable descriptions.

A probit model was used to predict attrition probabilities because the coefficients on the variables can easily be converted into probabilities. The regression coefficients of the probit model are effects on a cumulative normal function of the probabilities that the dependent variable equals one (i.e., the probability that a person does not complete RTC). This being the case, the coefficients are already of a form that can be interpreted, namely, the standard normal score or more commonly known as the “z-score”. Using this knowledge, the probit regression coefficients can be directly interpreted. The results of the theoretical model are:

attrflag = -1.4273 - 0.0052(afqt) + 0.0183(age) - 0.375(mast_deg2) - 0.2472(bach_deg2) - 0.142(assoc_deg2) + 0(hs_grad2) + 0.0425(fail_exit2) + 0.1995(adult_hs2) + 0.1837(sem_college2) + 0.349(home_school2) + 0.3347(GED2) + 0.044(other_non_trad2) + 0.2227(corr_school2) - 0.0029(cert_attnd2) + 0.193(ngycp2) + 0.36(no_cred2)

Table 47 has the full regression results. Interpreting the results using z-scores, one would say that: The z-score of a high school graduate of AFQT zero and age zero is -1.4273. For each point increase of AFQT, that z-score is reduced by 0.0052; for each year of age, the z-score is increased by 0.0183; if a person has a Master’s degree, the z-score in decreased by 0.375. Each education credential is binary and exclusive, meaning the values can only be zero or one, and if one of them equals one, the others must equal zero. The coefficients on fail_exit_I, other_non_trad_II, and cert_attend_II are not significantly different than zero. Each of these education credentials had very few representatives and, therefore, it is difficult to predict attrition probabilities for them. These three credentials will be dropped from further analyses.

Table 47. RTC Attrition Probit Model Results for AFQT, Age, and Education Variables.

Variables	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
afqt	-0.0052	0.0002	-24.13	0.000	***	-0.0008	60.061
ship_age	0.0183	0.0014	13.21	0.000	***	0.0030	20.457
mast_deg_I	-0.3750	0.2079	-1.80	0.071	*	-0.0476	0.001
bach_deg_I	-0.2472	0.0354	-6.98	0.000	***	-0.0345	0.017
assoc_deg_I	-0.1420	0.0429	-3.31	0.001	***	-0.0212	0.009
fail_exit_I	0.0425	0.0960	0.44	0.658		0.0072	0.001
adult_hs_I	0.1995	0.0220	9.05	0.000	***	0.0371	0.026
sem_college_I	0.1837	0.0186	9.87	0.000	***	0.0337	0.037
home_school_I	0.3490	0.0511	6.83	0.000	***	0.0713	0.004
GED_II	0.3347	0.0177	18.94	0.000	***	0.0669	0.038
other_non_trad_II	0.0440	0.2375	0.19	0.853		0.0075	0.000
corr_school_II	0.2227	0.1133	1.97	0.049	**	0.0422	0.001
cert_attnd_II	-0.0029	0.2322	-0.01	0.990		-0.0005	0.000
ngycp_II	0.1930	0.0445	4.34	0.000	***	0.0359	0.006
no_cred_III	0.3600	0.0205	17.53	0.000	***	0.0733	0.027
_cons	-1.4273	0.0304	-47.00	0.000	***		

Probit regression. Dependent variable is "attrited at RTC"
* Indicates coefficient is significant at 10-percent level or better
** Indicates coefficient is significant at 5-percent level or better
*** Indicates coefficient is significant at 1-percent level or better
Traditional high school graduate is omitted category
Number of obs = 213,250 Pseudo R^2 = 0.0121
Source: Derived from PRIDE data files (CNRC, 2007).

It is a simple process to change the predicted probit coefficients (z-scores) into probabilities using a table of the standard normal distribution or statistical software such as Stata or Excel. The probability that a high school graduate with a zero AFQT score and age is discharged from RTC is the probability associated with the z-score of -1.4273, or 0.0767. That is, if there were such a person, they would have a 7.67 percent chance of not completing RTC. For AFQT, a one-point increase reduces the probability of discharge by 0.0007. For age, a one year increase increases the probability of discharge by 0.0027. If a person possesses a Master’s degree, then the probability of discharge decreases by 0.0409.

These probabilities of attrition were used to construct tables showing the probabilities of discharge from recruit training based on education credential, age, and AFQT. Table 48 shows the probabilities of RTC attrition for a 20-year-old recruit based on AFQT and education credential. For example, the table shows that a 20-year-old high school graduate with an AFQT percentile score of 60 has an 8.8 percent probability of attrition at RTC.

Table 48. Probabilities (Percent) of RTC Attrition of 20-Year-Old Recruits by Education Credential, and AFQT Percentile Score

	Percent Probability of Attrition										
AFQT	Mast. Degree	Bach. Degree	Assoc. Degree	HS Grad	Adult HS Grad	Sem. College	Home School	GED	Corr. Course	NGYCP	No Cred
31	6.2	7.7	9.2	11.5	15.5	15.1	19.2	18.5	16.1	15.4	19.5
35	5.9	7.4	8.8	11.1	15.0	14.6	18.6	18.0	15.6	14.9	19.0
40	5.6	7.1	8.4	10.6	14.4	14.0	18.0	17.3	15.0	14.3	18.3
45	5.4	6.7	8.0	10.1	13.8	13.4	17.3	16.7	14.4	13.8	17.6
50	5.1	6.4	7.7	9.7	13.2	12.9	16.6	16.0	13.8	13.2	16.9
55	4.8	6.1	7.3	9.3	12.7	12.3	16.0	15.4	13.2	12.6	16.3
60	4.6	5.8	7.0	8.8	12.1	11.8	15.4	14.8	12.7	12.1	15.6
65	4.4	5.5	6.6	8.4	11.6	11.3	14.7	14.2	12.2	11.6	15.0
70	4.1	5.2	6.3	8.0	11.1	10.8	14.1	13.6	11.6	11.1	14.4
75	3.9	5.0	6.0	7.7	10.6	10.3	13.6	13.0	11.1	10.6	13.8
80	3.7	4.7	5.7	7.3	10.2	9.9	13.0	12.5	10.7	10.1	13.3
85	3.5	4.5	5.4	6.9	9.7	9.4	12.5	12.0	10.2	9.7	12.7
90	3.3	4.2	5.1	6.6	9.3	9.0	11.9	11.5	9.7	9.3	12.2
95	3.1	4.0	4.9	6.3	8.9	8.6	11.4	11.0	9.3	8.8	11.7
99	3.0	3.8	4.7	6.0	8.5	8.3	11.0	10.6	8.9	8.5	11.3

Source: Derived from PRIDE data files (CNRC, 2007).

Table 49 shows the actual attrition rates of 20-year-old recruits by education credential. It shows that 20-year-high school diploma graduates had a mean AFQT percentile score of 59.8 and they were discharged from RTC at a rate of 9.1 percent. The actual rate is close to the predicted rate, showing the probability table does a good job predicting attrition rates for high school graduates. Actual attrition rates for most other education credentials are higher than the predicted rates, suggesting that factors not present in the model affect attrition.

Table 49. AFQT Mean Percentile Score and Attrition Rate of 20-Year-Old Recruits by Education Credential

Education Credential	AFQT Mean Score	Attrition Rate (Percent)
Master's Degree	97.0	0.0
Bachelor's Degree	68.6	0.0
Associate's Degree	70.9	7.3
High School Diploma	59.8	9.1
Adult Education Diploma	53.7	14.3
Semester College/Job Corps	53.5	12.9
Home School Diploma	61.2	15.0
GED Certificate	65.4	13.5
Correspondence Courses, et al.	65.7	11.1
NGYCP or SCNGC	48.6	15.1
Non High School Graduate	63.1	15.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 50 shows predicted probabilities (percent) of attrition for traditional high school diploma graduates separated by age and AFQT score. For example, an 18-year-old recruit with an AFQT percentile score of 60 has a predicted attrition rate of 8.3 percent.

Table 50. Probabilities (Percent) of RTC Attrition for Traditional High School Diploma Graduates by Age and AFQT Percentile Score

	Probability of Attrition (Percent)							
AFQT	Age 17	Age 18	Age 19	Age 20	Age 21	Age 25	Age 29	Age 33
31	10.5	10.8	11.1	11.5	11.8	13.4	15.0	16.8
35	10.1	10.4	10.8	11.1	11.4	12.9	14.5	16.3
40	9.6	10.0	10.3	10.6	11.0	12.4	13.9	15.6
45	9.2	9.5	9.8	10.1	10.5	11.9	13.4	15.0
50	8.8	9.1	9.4	9.7	10.0	11.4	12.8	14.4
55	8.4	8.7	9.0	9.3	9.6	10.9	12.3	13.8
60	8.0	8.3	8.6	8.8	9.1	10.4	11.8	13.3
65	7.6	7.9	8.2	8.4	8.7	9.9	11.3	12.7
70	7.3	7.5	7.8	8.0	8.3	9.5	10.8	12.2
75	6.9	7.2	7.4	7.7	7.9	9.1	10.3	11.7
80	6.6	6.8	7.1	7.3	7.6	8.7	9.9	11.2
85	6.2	6.5	6.7	6.9	7.2	8.3	9.4	10.7
90	5.9	6.2	6.4	6.6	6.9	7.9	9.0	10.2
95	5.6	5.8	6.1	6.3	6.5	7.5	8.6	9.8
99	5.4	5.6	5.8	6.0	6.3	7.2	8.3	9.4

Source: Derived from PRIDE data files (CNRC, 2007).

Table 51 shows the AFQT mean percentile scores and actual attrition rates for traditional high school diploma graduates. The average AFQT for an 18-year-old recruit was 59.1, with a 7.8 percent attrition rate. The predicted probability for attrition of an 18-year-old recruit with an AFQT percentile score of 59 is just above 8.3 percent. For 33-year-old recruits with an AFQT percentile score of 60, the model predicts 13.3 percent attrition, while the actual rate was 12.5 percent for 33-year-old recruits with an AFQT mean percentile of 59.8. The model over-estimates attrition rates for recruits of some ages, and under-estimates at other ages. Attrition probability tables for each education credential and age are available in Appendix G.

Table 51. Mean AFQT and Attrition Rates of Traditional High School Diploma Graduate Recruits by Age

Age (Years)	AFQT Mean Score	Attrition Rate (Percent)
17	57.9	7.2
18	59.1	7.8
19	58.1	9.0
20	59.8	9.1
21	61.7	9.3
25	62.4	9.8
29	61.9	10.5
33	59.8	12.5

Source: Derived from PRIDE data files (CNRC, 2007).

The attrition probability tables were developed based on RTC data only. By using individual education credentials, age, and AFQT scores as predictors of attrition, accurate probability tables can also be developed for first-term attrition. This would allow Navy manning planners to more accurately predict attrition rates and adjust enlistment standards to lower overall first-term attrition. Reducing first-term attrition would decrease the burden on Navy Recruiting Districts and allow them to focus their recruiting efforts on prospective recruits with the lowest probabilities of attrition.

VI. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

A. SUMMARY

This study focused on general attrition trends in the Navy’s Delayed Entry Program (DEP) and Recruit Training Command (RTC). Once significant effects were identified using trend analysis, regression models were developed to validate the trends and to examine the effects of education credentials, enlistment programs, occupational ratings, and gender. The data used for this study were drawn from an extract of the Personalized Recruiting for Immediate and Delayed Enlistment (PRIDE) database, provided by Commander, Navy Recruiting Command (CNRC) in June 2007. The sample population includes individuals who entered the Navy’s DEP between fiscal years 1998 through 2005 (for DEP analysis) and Recruits who began training at RTC from fiscal years 2001 through 2005 (for the RTC analysis). The following is a summary of major findings from the trend analysis and regression models:

1. DEP Attrition Results

- The average time a person spends in DEP before starting active duty increased from 92 days (1998) to 157 days (2005), peaking at 173 days in 2003.
- The annual attrition rate increased from 18.5 percent (1998) to 23.6 percent (2005), and was closely correlated with the average yearly time in DEP.
- Attrition rates tend to increase as time in DEP increases, with the maximum rates at approximately 320 days in DEP (and a corresponding, estimation attrition rate of 35 percent).

- Average AFQT percentile score has increased by nearly 4 points over the course of the study, rising from 58.8 (1998) to 62.7 (2005).
- Average attrition rates of DEP members in school, both high school seniors and GED holders attending a semester of college (27.6 percent and 39.0 percent, respectively), were considerably higher than those of members not in school (16.3 percent).
- Attrition rates of A, B, and Cu-Cell DEP members who were not in school were very similar to each other and lower than those of A and Cu-Cell DEP members who were still in school.
- The only enlistment program with statistically significant lower DEP attrition, compared with that of GENDETs (general detail apprentices) is the Nuclear Field (NF) program. The higher attrition rates of the other programs are closely correlated with time in DEP. The lower attrition rates of the NF program are likely due to the specific program requirements, which tend to be highly selective.
- Approximately 19 percent of all DEP members over the course of the study were women. Women generally spent a longer time in DEP (119 days, on average) than men (135 days, on average) and, statistically, had significantly higher attrition rates.
- Attrition rates of A and Cu-Cell women who were still in school were generally much higher than for their counterparts who were not in school.
- Women in traditional ratings averaged a longer time in DEP (163 days) compared with their counterparts in nontraditional ratings (121 days).
- DEP times for women designated for both traditional and nontraditional occupations were strongly correlated with attrition rates.

2. RTC Attrition Results

- The number of recruits trained at RTC has declined from over 51,000 in FY2001 to just under 38,000 in FY2005.
- In general, as average time in DEP increased, RTC attrition decreased.
- Attrition rates at RTC are distinctly different by Recruit Quality Matrix cell, with A-Cell recruits having the lowest rates (8.1 percent) and B-Cell recruits having the highest rates (13.4 percent).
- Attrition rates by AFQT category were noticeably different, with AFQT Category I recruits at the low end (6.2 percent), and Category IIIB recruits at the high end (10.4 percent).
- Generally, recruits with more formal education tended to have a lower attrition rate.
- Education Tier I recruits who were adult education graduates, GED-holders who completed a semester of college or a Job Corps program, and home school graduates had attrition rates more in line with Tier II recruits than with other recruits in Tier I.
- Recruits designated for the NF program tended to have attrition rates that were significantly lower than those of GENDETs; no other program specific differences were statistically significant.
- Women were much more likely to be discharged from RTC (12.7 percent) than were men (8.6 percent).
- Married men and women were more likely to be discharged from RTC (11.9 percent) compared with their unmarried counterparts (9.2 percent).
- Women in traditional ratings, as a whole, did not tend to have lower attrition rates compared with their counterparts in nontraditional ratings; only women in the CTI, HM, and OS ratings had significantly lower attrition rates than did women in nontraditional ratings.

3. RTC Attrition Predictors Results

- The current Recruit Quality Matrix does not accurately predict attrition rates because individual education credentials are aggregated into only three cells and only take into account a combination of education Tier and AFQT score.
- More accurate RTC attrition predictors are found by separating the education Tiers into individual types of education credentials and deriving probabilities tables using AFQT score and age.
- Adult education graduates, GED holders with one semester of college or a Job Corps certificate, and home school graduates have predicted RTC attrition probabilities in line with Tier II recruits, regardless of age or AFQT score.

B. CONCLUSIONS

The major findings of this study are consistent with those of previous studies. For example, DEP members in school were found to have higher attrition rates than DEP members who had completed school or were otherwise in the workforce, between FY1998 and FY2005. The higher attrition rates of DEP members still in school are not surprising. High school seniors spend more time in DEP than do others, and they might be more easily influenced to renege on their decision to join the Navy. DEP members who are enrolled in adult education courses or in the process of earning 15 college credits are similar in many ways with persons who hold a GED, but are not eligible to join the Navy as Tier II qualified, due to low AFQT scores or civil infractions. The combination of dropping out of high school and a low AFQT score significantly reduces the probability that these persons will stay in the DEP until scheduled to enter active duty.

RTC attrition rates of recruits in Tier I with an alternative credential tend to be closer to Tier II rates than to the rates of other recruits in Tier I. Further, recruits with an adult education credential or a GED with one semester of college or a Job Corps certificate have personal characteristics similar to those of Tier II GED recruits (i.e., they dropped out of high school), yet they generally score lower on the AFQT; this may suggest that the combination of their education credential and their AFQT score is a better indicator of attrition than is their education credential alone. Recruits with a home school diploma also tended to have a lower AFQT score than did Tier II recruits, and they generally had even higher attrition rates than did other nontraditional Tier I recruits. Again, this suggests that the AFQT could be a significant factor in helping to predict attrition; it also suggests that home-schooled recruits could have a relatively greater difficulty than some others in adapting to the military environment.

The Recruit Quality Matrix does not utilize enough information currently available to be more effective in predicting attrition. Certain Tier I education credentials are markedly different from others in predicting attrition. Older recruits also tend to have a greater probability of being discharged during RTC than do younger recruits. These two factors, together with AFQT score, can be used to develop attrition probability tables that more accurately predict attrition rates than does the current matrix.

C. RECOMMENDATIONS

As noted above, DEP members still in school are less likely to ship to recruit training than are workforce DEP members. One explanation why high school seniors are discharged at a higher rate seems to be that they typically spend a very long time in DEP and cannot ship to recruit training until they graduate. During this relatively long period, high school seniors have ample opportunity to change their mind about the Navy, fail to graduate, get into trouble with the law, or be negatively influenced by their friends and family. DEP members who are attending adult education courses or earning 15 college credits are also in DEP for an extended period. These DEP members have several characteristics that may increase their probability of being discharged from DEP, including a lower average AFQT score, dropping out of high school, and civil infractions. Recruiting districts should focus their recruiting efforts on high-quality prospects who are already in the workforce and only supplement their efforts with high school seniors. Recruiting districts should be encouraged to limit the number of recruits in Tier I who have an alternative credential. These recruits tend to have relatively high attrition rates from both the DEP and RTC.

The Navy should consider revising its enlisted qualification standards to take account of rather marked differences between education credentials in the likelihood of attrition. If this is not feasible, another approach would be to revise standards for all Tier I applicants with an alternative education credential. If enlistment eligibility for these applicants were limited to those who score no lower than 50 on the AFQT, their chances of leaving DEP or RTC prematurely would be considerably reduced. As of 2007, home-schooled and Job Corps applicants must possess a score of at least 50 on the AFQT to be eligible for enlistment. Requiring the same standards for adult education graduates and GED holders with one semester of college would thus have a precedent and be similarly justified.

Finally, Navy Recruiting Command should seek to develop a new job reservation system that provides error checking, so inaccurate data are not entered into the database. For example, the system could possibly be designed to interact with the Military Entrance Processing Command’s (MEPCOM’s) database and the Social Security Administration’s data files so accurate personal information about each new recruit is automatically entered, minimizing human error.

D. FUTURE RESEARCH

1. Attrition at the Navy Recruiting District Level

This study suggests that recruits have widely different attrition rates based on Navy Recruiting Districts (NRDs). The demographic composition of the population—in terms of race, ethnicity, education quality, and socioeconomic factors—differs between the NRD territories. CNRC currently requires that NRDs conduct a monthly attrition analysis to “identify the trends associated with attrition in order to develop a plan of action for minimal impact on mission success.”[112] The analyses focus on in-month attrition rates, excessive requests for rollouts, and abnormally high RTC attrition, but not necessarily long-term attrition trends. Long-term trend analyses of attrition, such as the present study, could identify strengths and weaknesses for each NRD and allow the NRDs to adjust their marketing plans and focus more effectively on their strengths.

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[112] Commander, Navy Recruiting Command, Navy Recruiting Manual-Enlisted COMNAVCRUITCOMINST 1130.8G Volume II, (Millington, TN: CNRC, 2005), Chapter 7, Section 3, p. 4.

2. Cost-Benefit Analysis

This study suggests that DEP and RTC attrition rates can be reduced by altering current enlistment standards based on education credential, AFQT score, and age. To determine the feasibility of altering enlistment standards, a thorough cost-benefit analysis would need to be conducted to quantify the costs or savings associated with the revised standards. Among other considerations, an analysis of this type would need to determine if the lower attrition rates of Tier I recruits with traditional education is justified by their typically higher recruiting costs; conversely, the analysis would also need to calculate whether the lower costs of recruiting Tier I applicants with nontraditional education and B-Cell recruits offsets their higher attrition rates. Additionally, the cost-benefit analysis should study the costs associated with recruiting from the high school senior population versus the workforce population.

E. FINAL REMARKS

In closing, the usefulness of this study lies in helping the recruiting commands assess which prospective recruits are more likely to complete their term in the DEP, RTC, and first-term on active duty. Some of the recommendations can be implemented relatively easily, while others may require closer examination, experimentation, or significant investment. Of primary interest are the cost considerations of revising and implementing new standards, and the recruiting costs associated with reaching a higher quality market. On the other hand, the benefits of reduced attrition are well-known, including considerable cost savings, less organizational turbulence from personnel turnover, and, ultimately, a stringer Navy.

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APPENDIX A – DEP TABULAR DATA

Table 52. Number of DEP Members By Education Credential and Year of Entry, Fiscal Years 1998-2005

	Fiscal Year								
Education Credential	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Master's Degree	13	15	19	18	21	42	34	32	194
Bachelor's Degree	583	588	536	575	865	1,160	1,097	970	6,374
Associate's Degree	297	314	350	348	491	544	531	444	3,319
High School Diploma	27,472	28,860	31,681	32,068	33,958	29,314	28,038	25,893	237,284
High School Senior	17,497	19,191	20,010	19,815	18,467	15,674	16,265	14,492	141,411
Adult Education Diploma	1,124	1,174	947	980	930	513	467	377	6,512
Semester College/Job Corps	916	1,095	1,554	1,676	1,668	1,335	1,153	931	10,328
Enrolled Adult Ed/Semester College	2,284	2,800	3,176	3,121	2,795	1,274	1,008	478	16,936
Complete High School Fail Exit Exam				55	89	85	35	57	321
Home School Diploma	67	1,269	392	433	158	91	113	72	2,595
GED Certificate	1,759	3,617	3,186	3,152	1,934	1,928	1,088	1,580	18,244
Other Non-Traditional Diploma								178	178
Correspondence Courses, et al.	7	13	22	29	48	76	46	89	330
Certificate of Attendence	7	34	28	17	7	18	20	15	146
NGYCP or SCNGC	69	244	238	275	278	247	295	33	1,679
Non High School Graduate	1,243	2,622	2,774	2,715	1,451	1,379	578	658	13,420
Total	53,338	61,836	64,914	65,277	63,160	53,680	50,769	46,299	459,273

Source: Derived from PRIDE data files (CNRC, 2007).

Table 53. Percent Distributions of DEP Members by Educational Credential and Year of Entry, Fiscal Years 1998-2005

	Fiscal Year								
Education Credential	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Master's Degree	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Bachelor's Degree	1.1	1.0	0.8	0.9	1.4	2.2	2.2	2.1	1.4
Associate's Degree	0.6	0.5	0.5	0.5	0.8	1.0	1.0	1.0	0.7
High School Diploma	51.5	46.7	48.8	49.1	53.8	54.6	55.2	55.9	51.7
High School Senior	32.8	31.0	30.8	30.4	29.2	29.2	32.0	31.3	30.8
Adult Education Diploma	2.1	1.9	1.5	1.5	1.5	1.0	0.9	0.8	1.4
Semester College/Job Corps	1.7	1.8	2.4	2.6	2.6	2.5	2.3	2.0	2.2
Enrolled Adult Ed/Semester College	4.3	4.5	4.9	4.8	4.4	2.4	2.0	1.0	3.7
Complete High School Fail Exit Exam	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1
Home School Diploma	0.1	2.1	0.6	0.7	0.3	0.2	0.2	0.2	0.6
GED Certificate	3.3	5.8	4.9	4.8	3.1	3.6	2.1	3.4	4.0
Other Non-Traditional Diploma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Correspondence Courses, et al.	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1
Certificate of Attendence	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NGYCP or SCNGC	0.1	0.4	0.4	0.4	0.4	0.5	0.6	0.1	0.4
Non High School Graduate	2.3	4.2	4.3	4.2	2.3	2.6	1.1	1.4	2.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 54. Number of DEP Members by AFQT Category and Year of Entry, Fiscal Years 1998-2005

AFQT Categories	Fiscal Year								
	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Cat I (93-99)	2,513	2,551	2,617	2,530	3,041	3,232	3,145	2,917	22,546
Cat II (65-92)	18,027	20,043	20,607	20,772	20,857	19,606	18,116	17,370	155,398
Cat IIIA (50-64)	13,092	16,839	17,930	18,010	16,630	14,545	13,872	13,058	123,976
Cat IIIB (31-49)	19,706	22,403	23,760	23,965	22,632	16,297	15,636	12,954	157,353
Total	53,338	61,836	64,914	65,277	63,160	53,680	50,769	46,299	459,273

Source: Derived from PRIDE data files (CNRC, 2007).

Table 55. Percent Distribution of DEP Members by AFQT Category and Year of Entry, Fiscal Years 1998-2005

AFQT Categories	Fiscal Year								
	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Cat I (93-99)	4.7	4.1	4.0	3.9	4.8	6.0	6.2	6.3	4.9
Cat II (65-92)	33.8	32.4	31.7	31.8	33.0	36.5	35.7	37.5	33.8
Cat IIIA (50-64)	24.5	27.2	27.6	27.6	26.3	27.1	27.3	28.2	27.0
Cat IIIB (31-49)	36.9	36.2	36.6	36.7	35.8	30.4	30.8	28.0	34.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 56. Number of DEP Members by Recruit Quality Matrix Cell and Year of Entry, Fiscal Years 1998-2005

Recruit Quality Matrix Cell	Fiscal Year								
	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
A-Cell	31,490	33,055	35,060	35,301	37,000	33,887	33,272	30,795	269,860
B-Cell	2,142	6,378	6,094	6,011	3,528	3,496	1,861	2,550	32,060
Cu-Cell	18,763	22,251	23,605	23,788	22,442	16,145	15,469	12,951	155,414
Total	52,395	61,684	64,759	65,100	62,970	53,528	50,602	46,296	457,334

Source: Derived from PRIDE data files (CNRC, 2007).

Table 57. Percent Distribution of DEP Members by Recruit Quality Matrix Cell and Year of Entry, Fiscal Years 1998-2005

Recruit Quality Matrix Cell	Fiscal Year								
	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
A-Cell	60.1	53.6	54.1	54.2	58.8	63.3	65.8	66.5	59.0
B-Cell	4.1	10.3	9.4	9.2	5.6	6.5	3.7	5.5	7.0
Cu-Cell	35.8	36.1	36.5	36.5	35.6	30.2	30.6	28.0	34.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 58. Number of DEP Members by Education Tier and Year of Entry, Fiscal Years 1998-2005

	Fiscal Year								
Education Tier	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Tier I	50,253	55,306	58,665	59,089	59,442	50,032	48,741	43,746	425,274
Tier II	1,842	3,908	3,474	3,473	2,267	2,269	1,449	1,895	20,577
Tier III	1,243	2,622	2,774	2,715	1,451	1,379	578	658	13,420
Total	53,338	61,836	64,913	65,277	63,160	53,680	50,768	46,299	459,273

Source: Derived from PRIDE data files (CNRC, 2007).

Table 59. Percent Distribution of DEP Members by Education Tier and Year of Entry, Fiscal Years 1998-2005

	Fiscal Year								
Education Tier	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Tier I	94.2	89.4	90.4	90.5	94.1	93.2	96.0	94.5	92.6
Tier II	3.5	6.3	5.4	5.3	3.6	4.2	2.9	4.1	4.5
Tier III	2.3	4.2	4.3	4.2	2.3	2.6	1.1	1.4	2.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 60. Number of DEP Members by Gender and Year of Entry, Fiscal Years 1998-2005

	Fiscal Year								
Gender	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Men	42,777	49,279	52,211	52,238	49,858	45,685	41,268	37,552	370,868
Women	10,561	12,557	12,703	13,039	13,302	7,995	9,501	8,747	88,405
Total	53,338	61,836	64,914	65,277	63,160	53,680	50,769	46,299	459,273

Source: Derived from PRIDE data files (CNRC, 2007).

Table 61. Percent Distribution of DEP Members by Gender and Year of Entry, Fiscal Years 1998-2005

	Fiscal Year								
Gender	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Men	80.2	79.7	80.4	80.0	78.9	85.1	81.3	81.1	80.8
Women	19.8	20.3	19.6	20.0	21.1	14.9	18.7	18.9	19.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 62. Number of DEP Members by Race/Ethnicity and Year of Entry, Fiscal Years 1998-2005

	Fiscal Year								
Race/Ethnicity	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
White	29,466	33,405	34,559	35,319	33,666	28,249	24,793	22,506	241,963
Black	10,786	12,763	13,556	13,538	11,403	9,148	9,308	7,428	87,930
Hispanic	7,348	8,683	9,674	9,804	10,566	7,521	6,685	5,596	65,877
API/NatAm	5,097	6,324	6,498	6,052	6,260	6,504	6,717	6,752	50,204
Other	641	661	627	564	1,265	2,258	3,266	4,017	13,299
Total	53,338	61,836	64,914	65,277	63,160	53,680	50,769	46,299	459,273

Source: Derived from PRIDE data files (CNRC, 2007).

Table 63. Percent Distribution of DEP Members by Race/Ethnicity and Year of Entry, Fiscal Years 1998-2005

	Fiscal Year								
Race/Ethnicity	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
White	55.2	54.0	53.2	54.1	53.3	52.6	48.8	48.6	52.7
Black	20.2	20.6	20.9	20.7	18.1	17.0	18.3	16.0	19.1
Hispanic	13.8	14.0	14.9	15.0	16.7	14.0	13.2	12.1	14.3
API/NatAm	9.6	10.2	10.0	9.3	9.9	12.1	13.2	14.6	10.9
Other	1.2	1.1	1.0	0.9	2.0	4.2	6.4	8.7	2.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from PRIDE data files (CNRC, 2007).

Note: "API/NatAm" is a combination of Asian, Pacific Islander, and Native American. CNRC groups these races together when accounting for goals and attainments.

Note: "Other" includes DEP members who did not declare a race/ethnicity or declared multiple races/ethnicities.

Table 64. Number of DEP Members by Enlistment Program and Year of Entry, Fiscal Years 1998-2005

	Fiscal Year								
Enlistment Program	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
2YO	479	284	266	195	153	57	56		1,490
3YO	2,202	818	369	160	139				3,824
NCSA						38	1,895	2,436	4,369
NPSB					48	123	236	699	1,107
TEP	1,119	1,221	1,275	1,413	1,841	942	1,173	874	9,858
SF	12,626	12,473	16,087	13,265	12,826	12,101	11,884	9,682	100,944
SG	19,184	26,647	25,418	29,516	27,821	20,257	19,665	19,984	188,492
5YO	6,446	9,184	9,703	10,704	10,238	8,695	8,350	6,182	69,502
AEF	4,650	5,324	5,635	4,133	2,851	1,602	1,665	2,645	28,505
ATF	540	628	755	1,032	1,279	729	705	842	6,510
NF	4,262	3,865	3,617	3,260	2,986	2,689	2,551	2,693	25,923
GTEP			1,000	637	2,002	5,777	1,761		11,212
Other	1,830	1,357	789	961	976	668	825	262	7,668
Total	53,338	61,836	64,914	65,277	63,160	53,680	50,769	46,299	459,273

Source: Derived from PRIDE data files (CNRC, 2007).

Note: "Other" includes: Hospital Corpsman SEAL Program, Targeted A-School Program, Fleet Diver Program, JOBS Program, and Non-Prior Service Basic - Alpha Program. These programs contained very few members and are no longer offered as enlistment programs.

Table 65. Percent Distribution of DEP Members by Enlistment Program and Year of Entry, Fiscal Years 1998-2005

Enlistment Program	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
	Fiscal Year								
2YO	0.9	0.5	0.4	0.3	0.2	0.1	0.1		0.3
3YO	4.1	1.3	0.6	0.2	0.2				0.8
NCSA						0.1	3.7	5.3	1.0
NPSB					0.1	0.2	0.5	1.5	0.2
TEP	2.1	2.0	2.0	2.2	2.9	1.8	2.3	1.9	2.1
SF	23.7	20.2	24.8	20.3	20.3	22.5	23.4	20.9	22.0
SG	36.0	43.1	39.2	45.2	44.0	37.7	38.7	43.2	41.0
5YO	12.1	14.9	14.9	16.4	16.2	16.2	16.4	13.4	15.1
AEF	8.7	8.6	8.7	6.3	4.5	3.0	3.3	5.7	6.2
ATF	1.0	1.0	1.2	1.6	2.0	1.4	1.4	1.8	1.4
NF	8.0	6.3	5.6	5.0	4.7	5.0	5.0	5.8	5.6
GTEP			1.5	1.0	3.2	10.8	3.5		2.4
Other	3.4	2.2	1.2	1.5	1.5	1.2	1.6	0.6	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from PRIDE data files (CNRC, 2007).

Note: "Other" includes: Hospital Corpsman SEAL Program, Targeted A-School Program, Fleet Diver Program, JOBS Program, and Non-Prior Service Basic - Alpha Program. These programs contained very few members and are no longer offered as enlistment programs.

Table 66. Average Number of Days in DEP by Educational Credential and Year of Entry, Fiscal Years 1998-2005

	Fiscal Year								
Education Credential	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Master's Degree	69.0	38.5	60.3	56.5	93.6	158.3	96.8	103.5	97.2
Bachelor's Degree	61.9	60.4	53.7	58.0	103.0	160.2	147.3	139.9	110.8
Associate's Degree	57.5	53.0	43.7	50.2	101.9	150.8	146.3	133.5	101.1
High School Diploma	52.5	47.1	43.5	48.2	95.9	147.3	138.5	127.5	86.3
High School Senior	171.2	172.3	173.7	182.0	206.7	235.3	232.7	218.5	196.9
Adult Education Diploma	41.3	36.5	31.4	37.3	79.3	125.3	123.2	119.2	60.8
Semester College/Job Corps	40.8	35.2	31.2	35.2	70.8	118.9	118.2	117.0	68.3
Enrolled Adult Ed/College	91.3	83.4	95.0	98.2	134.1	162.3	168.4	163.7	111.0
Fail High School Exit Exam				42.5	94.5	111.7	147.9	117.2	100.0
Home School Diploma	78.5	31.0	28.0	34.3	77.7	129.6	130.6	167.8	46.7
GED Certificate	33.2	29.1	35.8	38.7	71.9	159.3	161.2	138.9	68.0
Correspondence Courses, et al.	47.4	26.6	31.9	41.6	122.3	170.0	151.7	147.5	125.5
Certificate of Attendence	22.9	33.4	34.9	48.9	106.3	210.3	119.7	139.7	83.0
NGYCP or SCNGC	102.5	45.1	30.8	31.6	62.0	123.7	134.0	153.7	75.3
Other Non-Traditional Diploma								151.2	151.2
Non High School Graduate	30.7	30.4	35.6	38.3	69.6	156.3	163.1	156.8	62.2
Total	91.7	85.2	84.9	89.8	127.7	173.3	169.6	157.4	119.3

Source: Derived from PRIDE data files (CNRC, 2007).

Table 67. Number of Female DEP Members by DEP Rating and Year of Entry, Fiscal Years 1998-2005 (Descending Order)

	Fiscal Year								
Rating	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
SN	2,412	1,730	1,679	1,364	1,452	897	1,555	1,389	12,478
AN	1,836	1,737	1,276	1,280	1,582	1,286	1,449	959	11,405
HM	717	1,159	1,475	1,843	1,667	1,171	1,348	665	10,045
IT	543	923	783	534	415	203	249	246	3,896
AECF	681	871	760	464	205	136	130	358	3,605
CS	217	319	405	537	645	212	260	269	2,864
AV	148	293	349	393	558	352	334	303	2,730
YN	329	724	567	278	178	152	225	101	2,554
MA	1		5	274	1,103	477	219	397	2,476
NF	451	325	370	332	288	241	222	245	2,474
SK	130	259	436	460	305	112	282	270	2,254
OS	318	564	178	275	161	222	318	203	2,239
AO	157	138	247	284	308	175	176	218	1,703
PS	94	287	293	280	221	99	224	131	1,629
FN	107	120	566	441	239	121	8		1,602
CTI	116	155	160	205	342	71	87	104	1,240
AC	154	197	106	188	158	105	125	199	1,232
AIRC	81	100	151	195	247	147	70	72	1,063
CTT	96	111	108	166	318	79	92	60	1,030
AD	79	173	138	231	111	40	66	111	949
SH	45	117	111	209	208	46	89	99	924
AIRR	66	127	148	149	151	100	53	81	875
QM	66	146	135	154	99	38	59	115	812
AZ	71	123	145	152	91	61	79	81	803
GM	95	103	106	129	128	62	83	82	788
IS	61	132	69	198	101	41	73	111	786

	Fiscal Year								
Rating	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
STG	135	124	100	132	112	35	43	96	777
MM	67	91	108	102	58	14	58	243	741
MC	61	149	104	126	67	49	92	54	702
EN	97	55	99	94	54	12	66	151	628
EM	67	78	77	133	74	17	25	103	574
IC	104	60	73	103	41	11	59	99	550
AM	37	26	30	31	73	34	83	188	502
ABH	39	57	71	48	52	23	45	77	412
CTR				22	114	109	92	66	403
BU	35	31	50	60	92	23	51	56	398
CTM	58	80	52	58	69	18	23	13	371
AS	47	42	51	46	80	23	34	41	364
PR	25	26	39	36	79	22	59	72	358
AG	48	71	35	66	31	18	44	30	343
ABE	38	43	37	62	49	19	25	43	316
DC	14	10	33	27	24	3	64	116	291
ABF	25	36	48	52	36	8	31	29	265
GSM	8	19	9	33	23	19	56	90	257
HT	8	8	16	14	54	12	25	73	210
EO	12	13	19	32	66	18	19	29	208
RP	21	39	46	54	1	1	2	5	169
CE	22	32	11	16	16	16	21	32	166
AME	19	10	6	22	15	5	22	47	146
UT	11	12	17	17	37	11	15	23	143
PC	20	16	25	11	18	17	19	11	137
CM	22	23	3	13	14	26	20	15	136
GSE	28	10	13	21	26	7	4	24	133
MU	14	7	21	20	13	15	14	12	116
SW	8	14	8	16	10	7	25	9	97
EA	5	11	18	8	9	1	9	8	69

	Fiscal Year								
Rating	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
MN	3	3	17	14	13	9	3	3	65
MR	1	2		5	14	1	5	10	38
Total	10,561	12,557	12,703	13,039	13,302	7,995	9,501	8,747	88,405

Source: Derived from PRIDE data files (CNRC, 2007).

Table 68. Attrition Rates (Percent) of Female DEP Members by Rating and Year of Entry, Fiscal Years 1998-2005 (Descending Order)

	Fiscal Year								
Rating	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
GSM	37.5	36.8	22.2	15.2	39.1	52.6	39.3	46.7	38.9
EO	33.3	15.4	52.6	43.8	31.8	50.0	42.1	37.9	38.0
UT	27.3	50.0	47.1	35.3	35.1	63.6	13.3	39.1	37.8
CTR				50.0	30.7	37.6	47.8	24.2	36.5
SW	25.0	28.6	12.5	18.8	20.0	57.1	52.0	55.6	35.1
ABH	41.0	35.1	18.3	33.3	40.4	30.4	28.9	42.9	33.7
PC	15.0	37.5	28.0	45.5	66.7	23.5	36.8	18.2	33.6
GM	27.4	25.2	29.2	20.2	38.3	48.4	38.6	52.4	33.4
AO	28.7	31.2	22.3	27.5	39.3	43.4	35.8	37.2	33.0
SH	17.8	29.1	23.4	29.2	35.6	54.3	40.4	40.4	32.9
AZ	12.7	23.6	27.6	34.2	35.2	45.9	46.8	44.4	32.8
MN	33.3	33.3	11.8	35.7	30.8	66.7	33.3	33.3	32.3
ABF	40.0	38.9	20.8	25.0	33.3	50.0	35.5	37.9	32.1
HM	28.6	30.2	25.7	27.5	33.7	37.9	38.6	36.2	31.9
CE	22.7	31.3	27.3	43.8	18.8	31.3	38.1	37.5	31.9
BU	31.4	32.3	30.0	26.7	34.8	39.1	33.3	30.4	31.9
MA	0.0		40.0	21.9	30.6	41.1	24.2	34.3	31.7
ABE	34.2	25.6	35.1	27.4	32.7	42.1	28.0	34.9	31.6
HT	12.5	25.0	25.0	28.6	14.8	50.0	52.0	38.4	31.4
QM	22.7	30.1	25.2	27.9	30.3	39.5	33.9	42.6	30.8
AS	17.0	21.4	21.6	32.6	41.3	43.5	35.3	34.1	30.8
EM	34.3	23.1	29.9	27.8	31.1	29.4	40.0	35.0	30.5
OS	21.7	19.9	37.6	29.8	39.1	42.3	37.1	36.9	30.4
PS	22.3	27.2	28.3	26.8	31.7	44.4	34.4	31.3	30.0
AC	19.5	21.3	35.8	25.0	32.3	42.9	35.2	36.2	30.0
MC	32.8	26.8	29.8	30.2	29.9	36.7	30.4	27.8	29.9

	Fiscal Year								
Rating	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
PR	20.0	19.2	25.6	25.0	25.3	54.5	27.1	40.3	29.6
AV	24.3	19.8	18.6	22.6	37.3	42.0	29.6	32.3	29.3
CTT	20.8	19.8	22.2	24.1	37.1	32.9	42.4	20.0	29.2
AG	25.0	21.1	22.9	27.3	41.9	44.4	38.6	30.0	29.2
CS	30.9	25.7	19.0	23.1	28.4	42.5	34.2	44.6	29.1
EA	40.0	36.4	44.4	12.5	33.3	0.0	0.0	25.0	29.0
AIRR	19.7	15.7	23.0	22.8	37.1	45.0	47.2	32.1	28.9
YN	18.2	24.6	22.9	38.1	42.7	38.2	39.6	38.6	28.8
AIRC	21.0	21.0	23.2	24.1	32.4	37.4	34.3	37.5	28.8
SK	19.2	18.5	17.9	26.5	38.0	33.9	39.0	38.5	28.4
SN	24.3	27.2	27.5	25.6	34.7	32.0	27.5	33.3	28.4
IC	23.1	33.3	34.2	17.5	24.4	63.6	32.2	33.3	28.4
STG	25.9	22.6	29.0	22.0	41.1	45.7	27.9	26.0	28.3
EN	20.6	40.0	22.2	20.2	31.5	25.0	22.7	35.8	27.4
AD	35.4	21.4	28.3	18.6	32.4	42.5	39.4	29.7	27.3
MM	34.3	22.0	19.4	23.5	37.9	21.4	19.0	32.1	27.3
CM	9.1	26.1	0.0	30.8	21.4	46.2	15.0	46.7	27.2
RP	14.3	23.1	41.3	20.4	0.0	100.0	50.0	20.0	26.6
NF	22.4	35.4	27.0	26.5	26.0	24.9	25.7	23.7	26.4
MR	0.0	0.0		40.0	28.6	0.0	20.0	30.0	26.3
IT	19.9	20.2	22.7	26.0	34.7	42.4	28.1	39.4	25.9
IS	31.1	25.0	24.6	17.7	29.7	51.2	28.8	24.3	25.8
AME	21.1	30.0	33.3	18.2	26.7	40.0	27.3	25.5	25.3
CTM	19.0	28.8	23.1	24.1	24.6	27.8	43.5	7.7	25.1
AM	21.6	30.8	10.0	25.8	12.3	41.2	26.5	28.2	24.9
AECF	22.2	20.8	21.7	21.6	29.8	37.5	38.5	35.5	24.6
FN	20.6	34.2	24.4	17.2	34.3	24.8	25.0		24.4
AN	19.0	19.7	23.4	20.6	33.5	21.8	23.0	21.6	22.8
GSE	28.6	30.0	7.7	23.8	15.4	14.3	25.0	29.2	22.6
DC	14.3	10.0	9.1	22.2	8.3	66.7	35.9	21.6	22.0

	Fiscal Year								
Rating	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
CTI	15.5	13.5	16.3	15.6	13.5	31.0	14.9	11.5	15.3
MU	14.3	0.0	9.5	10.0	7.7	13.3	14.3	0.0	9.5
Total	23.1	24.3	24.3	24.7	32.4	34.0	31.1	32.8	27.9

Source: Derived from PRIDE data files (CNRC, 2007).

Table 69. Average Time in DEP (Days) of Female DEP Members by DEP Rating and Year of Entry, Fiscal Years 1998-2005 (Descending Order)

	Fiscal Year								
Rating	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
CTR				318.3	230.1	293.3	262.7	137.5	244.3
HM	175.8	168.5	134.7	151.5	206.1	263.7	248.9	221.6	192.6
OS	96.0	114.1	183.4	147.4	242.3	264.9	224.5	189.1	167.8
AG	99.6	122.1	102.1	172.5	228.6	291.8	228.5	170.0	163.0
AC	83.9	102.2	102.2	122.0	208.8	255.4	216.2	218.8	160.1
CTT	100.8	105.9	105.5	107.0	197.2	255.3	258.9	115.6	159.4
CE	100.4	138.1	108.9	131.0	174.0	275.9	173.1	164.4	156.7
IS	123.4	142.9	132.5	115.6	206.2	265.9	191.7	167.7	156.2
NF	113.7	162.8	149.3	155.5	191.0	197.2	156.7	142.7	155.0
QM	113.2	98.8	111.6	129.6	203.1	227.7	228.2	232.0	154.9
PS	87.1	101.1	117.1	109.3	196.1	256.0	221.3	230.5	153.8
GM	117.6	88.3	122.1	94.0	182.6	255.0	203.3	236.0	153.2
AIRC	122.8	85.8	80.3	102.8	187.6	229.5	229.4	176.7	150.1
ABH	159.7	117.8	71.6	176.7	238.2	220.8	131.1	154.2	149.9
MC	123.7	117.2	190.0	132.2	149.1	151.6	157.8	182.6	147.0
AIRR	125.1	91.6	86.2	113.1	187.5	246.7	230.0	163.8	146.2
MA	13.0		32.6	70.8	131.2	218.6	100.8	167.5	144.2
AD	176.3	117.7	94.0	142.0	171.0	250.5	216.5	112.1	143.1
SW	114.0	110.6	124.0	49.7	175.6	222.9	193.1	142.1	140.9
YN	81.6	92.2	109.2	199.7	231.8	237.0	222.5	194.0	140.2
AZ	78.4	94.9	97.1	90.3	156.0	250.8	221.4	233.6	138.2
IT	82.1	96.1	108.1	145.0	219.3	242.7	165.7	215.8	136.0
SH	76.6	89.0	80.6	110.6	169.0	244.7	191.5	159.2	135.4
ABE	129.2	93.5	70.3	88.7	168.3	286.2	228.8	145.3	135.1
AV	98.4	84.3	64.5	80.9	179.3	234.1	146.1	144.5	135.0
EA	184.8	107.6	110.2	144.9	180.2	14.0	115.3	163.1	133.8

	Fiscal Year								
Rating	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
CTM	117.2	123.4	123.9	76.9	186.1	250.6	147.7	59.2	132.3
EO	90.4	132.9	155.6	81.7	128.7	242.9	131.5	124.3	131.5
AO	90.1	85.2	69.6	73.9	161.3	225.8	189.8	167.9	131.1
UT	112.1	80.5	112.1	89.8	160.3	205.7	108.1	128.3	128.6
ABF	150.0	133.4	70.2	92.3	177.9	268.4	164.1	114.4	127.1
RP	94.6	146.1	125.3	110.7	305.0	258.0	160.5	223.8	126.8
CM	68.0	109.2	89.7	49.8	78.1	222.1	159.3	146.3	126.3
BU	108.7	72.1	119.2	109.6	131.1	216.9	155.8	118.9	126.2
HT	41.9	108.5	59.9	81.2	105.1	270.9	152.3	143.4	126.2
AS	97.7	74.3	67.0	55.1	183.4	282.1	158.1	122.4	124.2
PR	58.0	62.2	54.5	73.6	102.3	190.5	148.0	212.9	123.4
IC	91.6	110.3	110.2	97.2	160.6	255.1	142.1	155.9	122.6
DC	71.5	70.1	52.7	81.4	149.8	122.7	113.7	157.9	121.0
CS	96.6	101.6	54.1	72.3	143.7	197.6	180.9	187.3	120.9
MR	22.0	41.0		109.4	98.0	334.0	129.0	150.6	118.6
GSM	103.1	84.6	158.4	50.6	145.7	184.1	116.1	124.3	117.0
AM	71.1	80.6	38.2	80.6	91.3	216.8	126.3	136.7	116.7
EM	121.6	89.9	114.0	114.3	149.5	250.1	117.9	92.0	116.5
GSE	92.1	172.2	121.7	95.7	112.1	252.7	154.5	93.9	116.2
AME	93.1	105.5	85.7	70.1	97.7	125.0	177.0	120.6	113.3
SN	79.8	100.4	94.6	94.4	172.4	133.4	127.1	136.0	113.0
STG	87.0	106.3	99.1	84.7	157.6	200.0	120.0	121.0	112.5
MN	86.3	25.0	65.8	85.1	142.2	213.2	155.7	114.0	111.1
SK	59.1	72.2	51.9	78.0	169.0	161.9	175.4	165.3	110.3
CTI	138.3	72.5	70.5	79.9	125.5	238.1	105.9	113.2	109.5
AECF	88.9	78.1	76.4	88.8	191.9	220.8	176.8	138.6	102.6
EN	69.7	131.5	66.9	72.0	123.9	308.6	75.5	129.0	99.1
AN	68.9	71.7	93.2	76.3	167.5	105.5	111.4	82.8	97.3
MU	134.2	119.0	52.7	57.5	132.9	129.0	88.1	94.4	94.8
MM	86.1	64.5	59.6	55.8	157.4	85.0	82.8	114.7	90.1

	Fiscal Year								
Rating	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
PC	51.3	88.8	67.8	49.3	127.5	84.4	136.7	86.9	87.3
FN	85.6	61.3	73.0	46.9	149.5	120.2	68.3		80.8
Total	94.2	102.3	98.0	106.8	171.3	190.9	165.3	152.8	131.5

Source: Derived from PRIDE data files (CNRC, 2007).

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APPENDIX B – DEP VARIABLES AND DESCRIPTIVE STATISTICS

Table 70. Variable Descriptions and Descriptive Statistics for DEP Attrition Analysis

Variable	**Description**	**Mean**	**Std. Dev.**	**Min**	**Max**
dep_atr	=1 if member attrited from DEP	0.2088	0.40645	0	1
unemp_rate	Unemployment rate from member's home of record at time of attrite/ship	5.23789	1.99946	0.7	30.6
reclass	=1 if re-classified while in DEP	0.1151	0.31915	0	1
enl_bonus	=1 if member received any type of enlistment bonus	0.54565	0.49791	0	1
age_17	=1 if 17 years old at DEP time	0.2159	0.41144	0	1
age_18	=1 if 18 years old at DEP time	0.27548	0.44675	0	1
age_19	=1 if 19 years old at DEP time	0.17195	0.37734	0	1
age_20	=1 if 20 years old at DEP time	0.10513	0.30672	0	1
age_21	=1 if 21 years old at DEP time	0.0678	0.2514	0	1
age_22	=1 if 22 years old at DEP time	0.04614	0.20978	0	1
age_23p	=1 if 23+ years old at DEP time	0.11762	0.32216	0	1
married_fem	=1 if married female at DEP time	0.00371	0.06076	0	1
single_fem	=1 if single female at DEP time	0.18878	0.39134	0	1
married_mal	=1 if a married male at DEP time	0.01228	0.11012	0	1
single_mal	=1 if a single male at DEP time	0.79523	0.40353	0	1
wht_only	=1 if race/ethnicity is only white	0.52003	0.4996	0	1
blk_only	=1 if race/ethnicity is only black	0.18956	0.39195	0	1
hsp_only	=1 if race/ethnicity is only hispanic	0.1488	0.35589	0	1
api_only	=1 if race/ethnicity is only asian/pacific island/native american	0.10843	0.31092	0	1
multi	=1 if member identifies more than one race/ethnicity	0.02717	0.16258	0	1
days_dep	Number of days in DEP	119.323	111.418	0	540
days_dep_sq	Number of days in DEP squared	26652	36638.6	0	291600

Variable	**Description**	**Mean**	**Std. Dev.**	**Min**	**Max**
afqt	AFQT Score, continuous variable from 31-99	59.4593	18.4544	31	99
cat1	=1 if AFQT >=93	0.04909	0.21606	0	1
cat2	=1 if AFQT >=65 and <=92	0.33836	0.47315	0	1
cat3a	=1 if AFQT >=50 and <=64	0.26994	0.44393	0	1
cat3b	=1 if AFQT >=31 and <=49	0.34261	0.47458	0	1
A_Cell	=1 if A-Cell	0.58858	0.49209	0	1
B_Cell	=1 if B-Cell	0.06898	0.25341	0	1
Cu_Cell	=1 if Cu-Cell	0.34101	0.47405	0	1
A_Cell_Grad	=1 if A-Cell (not in school)	0.37847	0.48501	0	1
Cu_Cell_Grad	=1 if Cu-Cell (not in school)	0.20602	0.40445	0	1
A_Cell_School	=1 if A-Cell (in school)	0.21062	0.40775	0	1
Cu_Cell_School	=1 if Cu-Cell (in school)	0.13499	0.34172	0	1
tier1	=1 if Tier I	0.92597	0.26182	0	1
tier2	=1 if Tier II	0.04481	0.20688	0	1
tier3	=1 if Tier III	0.02922	0.16842	0	1
tier1_school	=1 if Tier I and in School	0.34478	0.4753	0	1
GENDET	=1 if member in the GENDET program, 4 year obligor	0.21979	0.41411	0	1
SG	=1 if member in the School Guarantee program, 4 year obligor	0.41041	0.49191	0	1
fiveYO	=1 if member in the School Guarantee program, 5 year obligor	0.15133	0.35837	0	1
AEF	=1 if member in the SG Advanced Electronic Field program, 6 year obligor	0.06207	0.24127	0	1
ATF	=1 if member in the SG Advanced Technical Field program, 6 year obligor	0.01417	0.11821	0	1
NF	=1 if member in the Nuclear Field program, 6 year obligor	0.05644	0.23078	0	1
GTEP	=1 if member in the GENDET TAR Enlistment Program, 4/5 year obligor	0.02441	0.15433	0	1
TEP	=1 if member in the TAR/FTS Enlistment Program, 4-6 year obligor	0.02146	0.14493	0	1
twoYO	=1 if member in the GENDET program, 2 year obligor	0.00324	0.05687	0	1
threeYO	=1 if member in the GENDET program, 3 year obligor	0.00833	0.09087	0	1

Variable	**Description**	**Mean**	**Std. Dev.**	**Min**	**Max**
NCSA	=1 if member in the National Call to Service program	0.00951	0.09707	0	1
NPSB	=1 if member in the Non-Prior Service Basic program	0.00241	0.04904	0	1
other_ep	=1 if member in enlisted in JOBS, TASP, HM/SEAL, DIVR				
mast_deg_I	=1 if Masters Degree (code N)	0.00042	0.02055	0	1
bach_deg_I	=1 if Baccalaureate Degree (code K)	0.01388	0.11699	0	1
assoc_deg_I	=1 if Associate Degree (code D)	0.00723	0.0847	0	1
hs_grad_I	=1 if Traditional High School Diploma Graduate (code L)	0.51665	0.49972	0	1
hs_senior_I	=1 if High school senior (code S)	0.3079	0.46163	0	1
fail_exit_I	=1 if Complete HS, fail secondary school exit exam (code F)	0.0007	0.02643	0	1
adulted_15cred_I	=1 if Enrolled in adult ed, or earning 15 college credits (code M)	0.03688	0.18846	0	1
adult_hs_I	=1 if Adult high school diploma graduate (code B)	0.01418	0.11823	0	1
sem_college_I	=1 if completed 15 credits college or Job Corps (code 8)	0.02249	0.14826	0	1
GED_II	=1 if Test Based Equivalency, GED (code E)	0.03972	0.19531	0	1
other_non_trad_II	=1 if Other Non-Traditional High School Credential (code 5)	0.00039	0.01979	0	1
corr_school_II	=1 if Correspondent or Distance Learning, Home or Independent Study (code 7)	0.00072	0.0268	0	1
cert_attnd_II	=1 if High School Certificate of Attendance or Completion (code J)	0.00032	0.01783	0	1
ngycp_II	=1 if NGYCP or SCNGC (code X)	0.00366	0.06035	0	1
no_cred_III	=1 if Non-High School Graduate (code 1)	0.02922	0.16842	0	1
E1	=1 if exited DEP as an E1	0.9557	0.20577	0	1
E2	=1 if exited DEP as an E2	0.02195	0.14651	0	1
E3	=1 if exited DEP as an E3	0.02235	0.14784	0	1
FY1998	=1 if DEPped in FY1998	0.11614	0.32039	0	1
FY1999	=1 if DEPped in FY1999	0.13464	0.34134	0	1
FY2000	=1 if DEPped in FY2000	0.14134	0.34837	0	1
FY2001	=1 if DEPped in FY2001	0.14213	0.34919	0	1

Variable	**Description**	**Mean**	**Std. Dev.**	**Min**	**Max**
FY2002	=1 if DEPped in FY2002	0.13752	0.3444	0	1
FY2003	=1 if DEPped in FY2003	0.11688	0.32128	0	1
FY2005	=1 if DEPped in FY2005	0.10081	0.30108	0	1
Atlanta	=1 if NRD ATLANTA	0.03613	0.18662	0	1
FY2004	=1 if DEPped in FY2004	0.11054	0.31356	0	1
Chicago	=1 if NRD CHICAGO	0.04089	0.19804	0	1
Dallas	=1 if NRD DALLAS	0.04682	0.21126	0	1
Denver	=1 if NRD DENVER	0.02882	0.16731	0	1
Houston	=1 if NRD HOUSTON	0.043	0.20286	0	1
Jax	=1 if NRD JACKSONVILLE	0.033	0.17865	0	1
LA	=1 if NRD LOS ANGELES	0.04862	0.21506	0	1
Miami	=1 if NRD MIAMI	0.03844	0.19225	0	1
Michigan	=1 if NRD MICHIGAN	0.04522	0.20779	0	1
Minn	=1 if NRD MINNEAPOLIS	0.03199	0.17597	0	1
Nashville	=1 if NRD NASHVILLE	0.0364	0.18729	0	1
New_England	=1 if NRD NEW ENGLAND	0.03575	0.18567	0	1
New_Orleans	=1 if NRD NEW ORLEANS	0.03427	0.18193	0	1
New_York	=1 if NRD NEW YORK	0.0464	0.21036	0	1
Ohio	=1 if NRD OHIO	0.05143	0.22087	0	1
Philly	=1 if NRD PHILADELPHIA	0.03448	0.18245	0	1
Phoenix	=1 if NRD PHOENIX	0.03325	0.17928	0	1
Pittsburgh	=1 if NRD PITTSBURGH	0.03558	0.18523	0	1
Portland	=1 if NRD PORTLAND	0.02641	0.16035	0	1
Raleigh	=1 if NRD RALEIGH	0.04475	0.20676	0	1
Richmond	=1 if NRD RICHMOND	0.03687	0.18845	0	1
San_Anton	=1 if NRD SAN ANTONIO	0.03173	0.17528	0	1
San_Diego	=1 if NRD SAN DIEGO	0.04695	0.21152	0	1
San_Fran	=1 if NRD SAN FRANCISCO	0.04026	0.19657	0	1
Seattle	=1 if NRD SEATTLE	0.0299	0.1703	0	1
St_Louis	=1 if NRD ST LOUIS	0.04265	0.20206	0	1
ABE	=1 if enlisted rating is ABE	0.00538	0.07314	0	1
ABF	=1 if enlisted rating is ABF	0.00413	0.06411	0	1
ABH	=1 if enlisted rating is ABH	0.00552	0.0741	0	1
AC	=1 if enlisted rating is AC	0.01021	0.10053	0	1
AD	=1 if enlisted rating is AD	0.01663	0.12789	0	1
AECF	=1 if enlisted rating is AECF	0.05106	0.22012	0	1
AG	=1 if enlisted rating is AG	0.00332	0.05754	0	1
AIRC	=1 if enlisted rating is AIRC	0.01429	0.11867	0	1
AIRR	=1 if enlisted rating is AIRR	0.01347	0.11528	0	1
AM	=1 if enlisted rating is AM	0.02311	0.15026	0	1
AME	=1 if enlisted rating is AME	0.00591	0.07667	0	1

Variable	Description	Mean	Std. Dev.	Min	Max
AN	=1 if enlisted rating is AN	0.10985	0.31271	0	1
AO	=1 if enlisted rating is AO	0.02392	0.15279	0	1
AS	=1 if enlisted rating is AS	0.00609	0.07779	0	1
AV	=1 if enlisted rating is AV	0.04809	0.21396	0	1
AZ	=1 if enlisted rating is AZ	0.00664	0.08121	0	1
BU	=1 if enlisted rating is BU	0.00817	0.09001	0	1
CE	=1 if enlisted rating is CE	0.00334	0.0577	0	1
CM	=1 if enlisted rating is CM	0.00458	0.06752	0	1
CS	=1 if enlisted rating is CS	0.02511	0.15646	0	1
CSS	=1 if enlisted rating is CSS	0.00326	0.05697	0	1
CTI	=1 if enlisted rating is CTI	0.00591	0.07665	0	1
CTM	=1 if enlisted rating is CTM	0.00343	0.05845	0	1
CTR	=1 if enlisted rating is CTR	0.00348	0.05886	0	1
CTT	=1 if enlisted rating is CTT	0.00921	0.09551	0	1
DC	=1 if enlisted rating is DC	0.00848	0.09168	0	1
EA	=1 if enlisted rating is EA	0.00094	0.03064	0	1
EM	=1 if enlisted rating is EM	0.0129	0.11283	0	1
EN	=1 if enlisted rating is EN	0.01511	0.12199	0	1
EO	=1 if enlisted rating is EO	0.00495	0.07015	0	1
FN	=1 if enlisted rating is FN	0.03577	0.18572	0	1
GM	=1 if enlisted rating is GM	0.01323	0.11425	0	1
GSE	=1 if enlisted rating is GSE	0.00368	0.06056	0	1
GSM	=1 if enlisted rating is GSM	0.00694	0.08303	0	1
HM	=1 if enlisted rating is HM	0.08027	0.27171	0	1
HT	=1 if enlisted rating is HT	0.01081	0.10341	0	1
IC	=1 if enlisted rating is IC	0.01061	0.10247	0	1
IS	=1 if enlisted rating is IS	0.00701	0.08342	0	1
IT	=1 if enlisted rating is IT	0.03046	0.17185	0	1
MA	=1 if enlisted rating is MA	0.01879	0.13579	0	1
MC	=1 if enlisted rating is MC	0.00548	0.0738	0	1
MM	=1 if enlisted rating is MM	0.01902	0.1366	0	1
MMS	=1 if enlisted rating is MMS	0.00894	0.09415	0	1
MN	=1 if enlisted rating is MN	0.00251	0.05001	0	1
MR	=1 if enlisted rating is MR	0.00265	0.05137	0	1
MT	=1 if enlisted rating is MT	0.00386	0.06198	0	1
MU	=1 if enlisted rating is MU	0.00107	0.03272	0	1
NUKE	=1 if enlisted rating is NF	0.05898	0.23558	0	1
OS	=1 if enlisted rating is OS	0.0229	0.1496	0	1
PC	=1 if enlisted rating is PC	0.00091	0.03008	0	1
PR	=1 if enlisted rating is PR	0.00557	0.07442	0	1
PS	=1 if enlisted rating is PS	0.01031	0.10102	0	1

Variable	**Description**	**Mean**	**Std. Dev.**	**Min**	**Max**
QM	=1 if enlisted rating is QM	0.00877	0.09325	0	1
RP	=1 if enlisted rating is RP	0.00162	0.04019	0	1
SECF	=1 if enlisted rating is SECF	0.02289	0.14955	0	1
SH	=1 if enlisted rating is SH	0.00754	0.08652	0	1
SK	=1 if enlisted rating is SK	0.01574	0.12446	0	1
SKS	=1 if enlisted rating is SKS	0.0013	0.03599	0	1
SN	=1 if enlisted rating is SN	0.08975	0.28582	0	1
SS	=1 if enlisted rating is SS	0.00388	0.06214	0	1
STG	=1 if enlisted rating is STG	0.0095	0.097	0	1
SW	=1 if enlisted rating is SW	0.00304	0.05509	0	1
UT	=1 if enlisted rating is UT	0.00302	0.05484	0	1
YN	=1 if enlisted rating is YN	0.01432	0.11882	0	1
YNS	=1 if enlisted rating is YNS	0.00154	0.03925	0	1

Source: Derived from PRIDE data files (CNRC, 2007).

APPENDIX C – DEP ATTRITION REGRESSION ANALYSIS

Table 71. DEP Regression results, AFQT categories

Variable	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
unemp_rate	-0.0120	0.0013	-9.49	0.000	***	-0.0034	5.238
reclass	0.0580	0.0070	8.26	0.000	***	0.0165	0.115
enl_bonus	-0.1367	0.0048	-28.66	0.000	***	-0.0385	0.546
age_17	0.1017	0.0062	16.40	0.000	***	0.0292	0.216
age_19	-0.0343	0.0067	-5.13	0.000	***	-0.0095	0.172
age_20	-0.0255	0.0079	-3.20	0.001	***	-0.0071	0.105
age_21	-0.0332	0.0095	-3.50	0.000	***	-0.0092	0.068
age_22	-0.0056	0.0111	-0.50	0.614		-0.0016	0.046
age_23p	0.0055	0.0079	0.70	0.482		0.0016	0.118
married_fem	0.2723	0.0342	7.96	0.000	***	0.0845	0.004
single_fem	0.2593	0.0053	48.87	0.000	***	0.0773	0.189
married_mal	-0.1389	0.0220	-6.31	0.000	***	-0.0366	0.012
blk_only	-0.0058	0.0061	-0.95	0.343		-0.0016	0.191
hsp_only	-0.0034	0.0070	-0.49	0.626		-0.0009	0.143
api_only	-0.0423	0.0075	-5.65	0.000	***	-0.0117	0.109
multi	-0.0157	0.0143	-1.10	0.272		-0.0044	0.024
oth_only	-0.0231	0.0301	-0.77	0.443		-0.0064	0.005
days_dep	0.0047	0.0001	65.36	0.000	***	0.0013	119.3
days_dep_sq	0.0000	0.0000	-49.55	0.000	***	0.0000	26652.0
cat1	**0.0432**	**0.0113**	**3.84**	**0.000**	*******	**0.0123**	**0.049**
cat3a	**0.0358**	**0.0059**	**6.11**	**0.000**	*******	**0.0101**	**0.270**
cat3b	**0.0476**	**0.0062**	**7.69**	**0.000**	*******	**0.0134**	**0.343**
SG	0.0546	0.0062	8.78	0.000	***	0.0153	0.410
fiveYO	0.0135	0.0077	1.76	0.079	*	0.0038	0.151
AEF	0.0271	0.0112	2.43	0.015	**	0.0077	0.062
ATF	-0.0649	0.0193	-3.36	0.001	***	-0.0177	0.014
NF	-0.1695	0.0127	-13.34	0.000	***	-0.0444	0.056
GTEP	-0.1394	0.0155	-8.97	0.000	***	-0.0368	0.024
TEP	-0.0310	0.0156	-1.99	0.047	**	-0.0086	0.021
twoYO	-0.0212	0.0384	-0.55	0.582		-0.0059	0.003
threeYO	-0.0053	0.0243	-0.22	0.827		-0.0015	0.008
NCSA	-0.0299	0.0231	-1.29	0.196		-0.0083	0.010
NPSB	-0.1097	0.0443	-2.48	0.013	**	-0.0293	0.002
other_ep	-0.0680	0.0175	-3.89	0.000	***	-0.0185	0.016
E2	-0.5449	0.0178	-30.68	0.000	***	-0.1187	0.022

Variable	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
E3	-0.2253	0.0160	-14.06	0.000***	-0.0572	0.022
FY1999	0.0540	0.0089	6.05	0.000***	0.0154	0.135
FY2000	0.0775	0.0090	8.65	0.000***	0.0222	0.141
FY2001	0.0834	0.0089	9.42	0.000***	0.0239	0.142
FY2002	0.0997	0.0091	10.95	0.000***	0.0287	0.138
FY2003	0.1507	0.0095	15.80	0.000***	0.0442	0.117
FY2004	0.1698	0.0097	17.58	0.000***	0.0501	0.111
FY2005	0.1319	0.0096	13.68	0.000***	0.0385	0.101
Chicago	-0.0674	0.0153	-4.42	0.000***	-0.0184	0.041
Dallas	-0.0352	0.0149	-2.36	0.018**	-0.0097	0.047
Denver	-0.0345	0.0168	-2.05	0.040**	-0.0095	0.029
Houston	-0.0649	0.0152	-4.28	0.000***	-0.0177	0.043
Jax	-0.0648	0.0160	-4.06	0.000***	-0.0177	0.033
LA	-0.0717	0.0150	-4.77	0.000***	-0.0195	0.049
Miami	-0.1240	0.0157	-7.88	0.000***	-0.0330	0.038
Michigan	0.0078	0.0148	0.52	0.601	0.0022	0.045
Minn	-0.1738	0.0167	-10.41	0.000***	-0.0453	0.032
Nashville	-0.0184	0.0157	-1.17	0.241	-0.0051	0.036
New_England	-0.0976	0.0158	-6.16	0.000***	-0.0263	0.036
New_Orleans	0.0254	0.0157	1.62	0.106	0.0072	0.034
New_York	-0.0703	0.0151	-4.67	0.000***	-0.0191	0.046
Ohio	0.0074	0.0145	0.51	0.609	0.0021	0.051
Philly	-0.1185	0.0160	-7.41	0.000***	-0.0316	0.034
Phoenix	-0.0686	0.0163	-4.21	0.000***	-0.0187	0.033
Pittsburgh	-0.0842	0.0159	-5.29	0.000***	-0.0228	0.036
Portland	-0.0813	0.0175	-4.63	0.000***	-0.0220	0.026
Raleigh	-0.0612	0.0149	-4.10	0.000***	-0.0167	0.045
Richmond	-0.1138	0.0157	-7.25	0.000***	-0.0304	0.037
San_Anton	-0.0165	0.0165	-1.00	0.318	-0.0046	0.032
San_Diego	-0.1029	0.0151	-6.80	0.000***	-0.0277	0.047
San_Fran	-0.1557	0.0161	-9.69	0.000***	-0.0409	0.040
Seattle	-0.0986	0.0169	-5.84	0.000***	-0.0265	0.030
St_Louis	-0.0479	0.0152	-3.15	0.002***	-0.0131	0.043
_cons	-1.0944	0.0162	-67.46	0.000***		

Probit regression. Dependent variable is "attrited in DEP"

* Indicates coefficient is significant at 10-percent level or better

** Indicates coefficient is significant at 5-percent level or better

*** Indicates coefficient is significant at 1-percent level or better

AFQT Category II is omitted category

Number of obs = 459,273   Pseudo R^2 = 0.0370

Source: Derived from PRIDE data files (CNRC, 2007).

Table 72. DEP Attrition Regression results, Education Tier Categories

Variable	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
unemp_rate	-0.0121	0.0013	-9.53	0.000	***	-0.0034	5.238
reclass	0.0561	0.0070	7.99	0.000	***	0.0160	0.115
enl_bonus	-0.1425	0.0048	-29.52	0.000	***	-0.0401	0.546
age_17	0.0995	0.0062	16.01	0.000	***	0.0285	0.216
age_19	-0.0337	0.0067	-5.05	0.000	***	-0.0093	0.172
age_20	-0.0250	0.0080	-3.15	0.002	***	-0.0069	0.105
age_21	-0.0328	0.0095	-3.46	0.001	***	-0.0091	0.068
age_22	-0.0046	0.0111	-0.42	0.676		-0.0013	0.046
age_23p	0.0067	0.0079	0.85	0.395		0.0019	0.118
married_fem	0.2710	0.0342	7.92	0.000	***	0.0841	0.004
single_fem	0.2574	0.0053	48.46	0.000	***	0.0767	0.189
married_mal	-0.1373	0.0220	-6.24	0.000	***	-0.0362	0.012
blk_only	-0.0056	0.0062	-0.91	0.361		-0.0016	0.191
hsp_only	-0.0033	0.0070	-0.47	0.635		-0.0009	0.143
api_only	-0.0427	0.0075	-5.70	0.000	***	-0.0118	0.109
multi	-0.0158	0.0143	-1.10	0.269		-0.0044	0.024
oth_only	-0.0233	0.0301	-0.78	0.438		-0.0065	0.005
days_dep	0.0047	0.0001	65.07	0.000	***	0.0013	119.3
days_dep_sq	0.0000	0.0000	-49.44	0.000	***	0.0000	26652.0
afqt	-0.0007	0.0002	-4.36	0.000	***	-0.0002	59.459
tier2	**-0.0182**	**0.0108**	**-1.69**	**0.092**	*****	**-0.0051**	**0.045**
tier3	**-0.0577**	**0.0135**	**-4.28**	**0.000**	*******	**-0.0158**	**0.029**
SG	0.0517	0.0062	8.35	0.000	***	0.0145	0.410
fiveYO	0.0098	0.0077	1.28	0.199		0.0028	0.151
AEF	0.0172	0.0113	1.52	0.129		0.0048	0.062
ATF	-0.0692	0.0194	-3.57	0.000	***	-0.0188	0.014
NF	-0.1623	0.0129	-12.57	0.000	***	-0.0426	0.056
GTEP	-0.1410	0.0155	-9.09	0.000	***	-0.0372	0.024
TEP	-0.0362	0.0155	-2.33	0.020	**	-0.0100	0.021
twoYO	-0.0262	0.0384	-0.68	0.496		-0.0072	0.003
threeYO	-0.0062	0.0243	-0.26	0.799		-0.0017	0.008
NCSA	-0.0365	0.0230	-1.58	0.113		-0.0101	0.010
NPSB	-0.1156	0.0443	-2.61	0.009	***	-0.0308	0.002
other_ep	-0.0694	0.0175	-3.97	0.000	***	-0.0189	0.016
E2	-0.5458	0.0178	-30.72	0.000	***	-0.1188	0.022
E3	-0.2251	0.0160	-14.04	0.000	***	-0.0572	0.022
FY1999	0.0577	0.0089	6.46	0.000	***	0.0164	0.135
FY2000	0.0818	0.0090	9.10	0.000	***	0.0234	0.141
FY2001	0.0873	0.0089	9.85	0.000	***	0.0251	0.142

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**		**Partial Effects**	**Mean**
FY2002	0.1030	0.0091	11.32	0.000	***	0.0297	0.138
FY2003	0.1536	0.0096	16.08	0.000	***	0.0451	0.117
FY2004	0.1736	0.0097	17.96	0.000	***	0.0513	0.111
FY2005	0.1345	0.0096	13.94	0.000	***	0.0393	0.101
Chicago	-0.0676	0.0153	-4.43	0.000	***	-0.0184	0.041
Dallas	-0.0356	0.0149	-2.38	0.017	**	-0.0098	0.047
Denver	-0.0343	0.0168	-2.04	0.041	**	-0.0095	0.029
Houston	-0.0657	0.0152	-4.32	0.000	***	-0.0179	0.043
Jax	-0.0648	0.0160	-4.06	0.000	***	-0.0177	0.033
LA	-0.0703	0.0150	-4.68	0.000	***	-0.0191	0.049
Miami	-0.1243	0.0157	-7.90	0.000	***	-0.0331	0.038
Michigan	0.0077	0.0148	0.52	0.604		0.0022	0.045
Minn	-0.1742	0.0167	-10.44	0.000	***	-0.0454	0.032
Nashville	-0.0186	0.0157	-1.18	0.236		-0.0052	0.036
New_England	-0.0980	0.0158	-6.19	0.000	***	-0.0264	0.036
New_Orleans	0.0258	0.0157	1.64	0.101		0.0073	0.034
New_York	-0.0710	0.0151	-4.71	0.000	***	-0.0193	0.046
Ohio	0.0075	0.0145	0.52	0.604		0.0021	0.051
Philly	-0.1185	0.0160	-7.41	0.000	***	-0.0316	0.034
Phoenix	-0.0682	0.0163	-4.18	0.000	***	-0.0186	0.033
Pittsburgh	-0.0838	0.0159	-5.27	0.000	***	-0.0227	0.036
Portland	-0.0805	0.0175	-4.59	0.000	***	-0.0218	0.026
Raleigh	-0.0607	0.0149	-4.07	0.000	***	-0.0166	0.045
Richmond	-0.1135	0.0157	-7.23	0.000	***	-0.0303	0.037
San_Anton	-0.0167	0.0165	-1.01	0.313		-0.0046	0.032
San_Diego	-0.1023	0.0151	-6.76	0.000	***	-0.0275	0.047
San_Fran	-0.1554	0.0161	-9.67	0.000	***	-0.0409	0.040
Seattle	-0.0984	0.0169	-5.82	0.000	***	-0.0265	0.030
St_Louis	-0.0482	0.0152	-3.17	0.002	***	-0.0132	0.043
_cons	-1.0190	0.0170	-60.04	0.000	***		

Probit regression. Dependent variable is "attrited in DEP"

* Indicates coefficient is significant at 10-percent level or better

** Indicates coefficient is significant at 5-percent level or better

*** Indicates coefficient is significant at 1-percent level or better

Tier I is omitted category

Number of obs = 459,273 Pseudo R^2 = 0.0369

Source: Derived from PRIDE data files (CNRC, 2007).

Table 73. DEP Attrition Regression results, Education Tiers with DEP members in school separated

Variable	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
unemp_rate	-0.0121	0.0013	-9.49	0.000***	-0.0034	5.238
reclass	0.0096	0.0071	1.36	0.174	0.0027	0.115
enl_bonus	-0.1347	0.0049	-27.77	0.000***	-0.0376	0.546
age_17	-0.0195	0.0065	-3.00	0.003***	-0.0054	0.216
age_19	0.0808	0.0070	11.59	0.000***	0.0230	0.172
age_20	0.1174	0.0083	14.13	0.000***	0.0339	0.105
age_21	0.1160	0.0098	11.82	0.000***	0.0336	0.068
age_22	0.1464	0.0114	12.89	0.000***	0.0430	0.046
age_23p	0.1589	0.0083	19.19	0.000***	0.0464	0.118
married_fem	0.2999	0.0343	8.76	0.000***	0.0934	0.004
single_fem	0.2920	0.0054	54.51	0.000***	0.0872	0.189
married_mal	-0.1360	0.0221	-6.16	0.000***	-0.0357	0.012
blk_only	-0.0006	0.0062	-0.10	0.917	-0.0002	0.191
hsp_only	-0.0030	0.0070	-0.42	0.672	-0.0008	0.143
api_only	-0.0397	0.0075	-5.29	0.000***	-0.0109	0.109
multi	-0.0119	0.0143	-0.83	0.406	-0.0033	0.024
oth_only	-0.0216	0.0302	-0.72	0.475	-0.0060	0.005
days_dep	0.0040	0.0001	54.96	0.000***	0.0011	119.3
days_dep_sq	0.0000	0.0000	-45.69	0.000***	0.0000	26652.0
afqt	0.0002	0.0002	1.14	0.255	0.0000	59.459
tier1_school	**0.4025**	**0.0063**	**64.36**	**0.000*** **	**0.1175**	**0.345**
tier2	**0.0728**	**0.0109**	**6.68**	**0.000*** **	**0.0208**	**0.045**
tier3	**0.0439**	**0.0136**	**3.23**	**0.001*** **	**0.0124**	**0.029**
SG	0.0508	0.0062	8.17	0.000***	0.0142	0.410
fiveYO	0.0125	0.0077	1.63	0.103	0.0035	0.151
AEF	0.0100	0.0114	0.88	0.379	0.0028	0.062
ATF	-0.0707	0.0195	-3.64	0.000***	-0.0191	0.014
NF	-0.1598	0.0129	-12.35	0.000***	-0.0417	0.056
GTEP	-0.1521	0.0156	-9.76	0.000***	-0.0397	0.024
TEP	-0.0285	0.0156	-1.82	0.068*	-0.0078	0.021
twoYO	-0.0003	0.0385	-0.01	0.994	-0.0001	0.003
threeYO	-0.0044	0.0244	-0.18	0.856	-0.0012	0.008
NCSA	-0.0339	0.0231	-1.47	0.143	-0.0093	0.010
NPSB	-0.1044	0.0442	-2.36	0.018**	-0.0277	0.002
other_ep	-0.0574	0.0176	-3.27	0.001***	-0.0156	0.016
E2	-0.5330	0.0178	-29.97	0.000***	-0.1158	0.022
E3	-0.2068	0.0160	-12.89	0.000***	-0.0526	0.022
FY1999	0.0514	0.0090	5.72	0.000***	0.0145	0.135

Variable	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
FY2000	0.0740	0.0090	8.19	0.000***	0.0210	0.141
FY2001	0.0841	0.0089	9.42	0.000***	0.0240	0.142
FY2002	0.1259	0.0092	13.75	0.000***	0.0363	0.138
FY2003	0.2095	0.0096	21.75	0.000***	0.0621	0.117
FY2004	0.2215	0.0097	22.77	0.000***	0.0660	0.111
FY2005	0.1815	0.0097	18.69	0.000***	0.0535	0.101
Chicago	-0.0490	0.0153	-3.20	0.001***	-0.0134	0.041
Dallas	-0.0374	0.0150	-2.50	0.013**	-0.0103	0.047
Denver	-0.0363	0.0169	-2.15	0.031**	-0.0100	0.029
Houston	-0.0702	0.0153	-4.60	0.000***	-0.0190	0.043
Jax	-0.0430	0.0160	-2.68	0.007***	-0.0117	0.033
LA	-0.0499	0.0151	-3.31	0.001***	-0.0136	0.049
Miami	-0.1123	0.0158	-7.10	0.000***	-0.0298	0.038
Michigan	0.0064	0.0149	0.43	0.670	0.0018	0.045
Minn	-0.1690	0.0168	-10.08	0.000***	-0.0438	0.032
Nashville	-0.0130	0.0157	-0.82	0.410	-0.0036	0.036
New_England	-0.0881	0.0159	-5.53	0.000***	-0.0236	0.036
New_Orleans	0.0280	0.0158	1.77	0.076*	0.0079	0.034
New_York	-0.0500	0.0151	-3.30	0.001***	-0.0136	0.046
Ohio	0.0059	0.0145	0.41	0.682	0.0017	0.051
Philly	-0.0986	0.0161	-6.14	0.000***	-0.0263	0.034
Phoenix	-0.0676	0.0164	-4.13	0.000***	-0.0183	0.033
Pittsburgh	-0.0769	0.0160	-4.81	0.000***	-0.0207	0.036
Portland	-0.0770	0.0176	-4.37	0.000***	-0.0207	0.026
Raleigh	-0.0337	0.0150	-2.25	0.024**	-0.0093	0.045
Richmond	-0.0857	0.0158	-5.43	0.000***	-0.0230	0.037
San_Anton	-0.0197	0.0166	-1.19	0.235	-0.0054	0.032
San_Diego	-0.0734	0.0152	-4.83	0.000***	-0.0198	0.047
San_Fran	-0.1338	0.0161	-8.29	0.000***	-0.0352	0.040
Seattle	-0.1025	0.0170	-6.04	0.000***	-0.0273	0.030
St_Louis	-0.0486	0.0152	-3.19	0.001***	-0.0133	0.043
_cons	-1.2411	0.0174	-71.17	0.000***		

Probit regression. Dependent variable is "attrited in DEP"

* Indicates coefficient is significant at 10-percent level or better

** Indicates coefficient is significant at 5-percent level or better

*** Indicates coefficient is significant at 1-percent level or better

Tier I not in school is omitted category

Number of obs = 459,273   Pseudo R^2 = 0.0458

Source: Derived from PRIDE data files (CNRC, 2007).

Table 74. DEP Attrition Regression results, Recruit Quality Matrix Cells

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
unemp_rate	-0.0120	0.0013	-9.44	0.000***	-0.0034	5.238
reclass	0.0562	0.0070	8.00	0.000***	0.0160	0.115
enl_bonus	-0.1404	0.0048	-29.11	0.000***	-0.0395	0.546
age_17	0.1002	0.0062	16.11	0.000***	0.0287	0.216
age_19	-0.0340	0.0067	-5.09	0.000***	-0.0094	0.172
age_20	-0.0254	0.0079	-3.20	0.001***	-0.0071	0.105
age_21	-0.0334	0.0095	-3.52	0.000***	-0.0092	0.068
age_22	-0.0058	0.0110	-0.52	0.600	-0.0016	0.046
age_23p	0.0052	0.0078	0.67	0.505	0.0015	0.118
married_fem	0.2725	0.0342	7.96	0.000***	0.0846	0.004
single_fem	0.2583	0.0053	48.56	0.000***	0.0770	0.189
married_mal	-0.1370	0.0220	-6.22	0.000***	-0.0362	0.012
blk_only	-0.0043	0.0061	-0.70	0.485	-0.0012	0.191
hsp_only	-0.0024	0.0070	-0.34	0.735	-0.0007	0.143
api_only	-0.0421	0.0075	-5.63	0.000***	-0.0116	0.109
multi	-0.0144	0.0143	-1.01	0.313	-0.0040	0.024
oth_only	-0.0229	0.0301	-0.76	0.447	-0.0064	0.005
days_dep	0.0047	0.0001	65.10	0.000***	0.0013	119.3
days_dep_sq	0.0000	0.0000	-49.42	0.000***	0.0000	26652.0
B_Cell	**-0.0252**	**0.0091**	**-2.78**	**0.005*****	**-0.0070**	**0.071**
Cu_Cell	**0.0223**	**0.0054**	**4.14**	**0.000*****	**0.0063**	**0.340**
SG	0.0511	0.0062	8.25	0.000***	0.0144	0.410
fiveYO	0.0094	0.0077	1.23	0.220	0.0026	0.151
AEF	0.0098	0.0107	0.91	0.362	0.0028	0.062
ATF	-0.0729	0.0192	-3.79	0.000***	-0.0198	0.014
NF	-0.1763	0.0118	-14.96	0.000***	-0.0461	0.056
GTEP	-0.1407	0.0155	-9.06	0.000***	-0.0371	0.024
TEP	-0.0364	0.0155	-2.34	0.019**	-0.0101	0.021
twoYO	-0.0242	0.0384	-0.63	0.528	-0.0067	0.003
threeYO	-0.0060	0.0243	-0.25	0.806	-0.0017	0.008
NCSA	-0.0353	0.0231	-1.53	0.126	-0.0097	0.010
NPSB	-0.1135	0.0443	-2.56	0.010***	-0.0302	0.002
other_ep	-0.0686	0.0175	-3.92	0.000***	-0.0187	0.016
E2	-0.5466	0.0178	-30.76	0.000***	-0.1189	0.022
E3	-0.2271	0.0160	-14.18	0.000***	-0.0577	0.022
FY1999	0.0565	0.0089	6.32	0.000***	0.0161	0.135
FY2000	0.0803	0.0090	8.94	0.000***	0.0230	0.141
FY2001	0.0858	0.0089	9.67	0.000***	0.0246	0.142
FY2002	0.1011	0.0091	11.10	0.000***	0.0292	0.138

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**		**Partial Effects**	**Mean**
FY2003	0.1512	0.0095	15.84	0.000	***	0.0443	0.117
FY2004	0.1710	0.0097	17.70	0.000	***	0.0505	0.111
FY2005	0.1326	0.0096	13.76	0.000	***	0.0388	0.101
Chicago	-0.0683	0.0153	-4.48	0.000	***	-0.0186	0.041
Dallas	-0.0357	0.0149	-2.39	0.017	**	-0.0099	0.047
Denver	-0.0351	0.0168	-2.09	0.037	**	-0.0097	0.029
Houston	-0.0655	0.0152	-4.31	0.000	***	-0.0179	0.043
Jax	-0.0649	0.0160	-4.06	0.000	***	-0.0177	0.033
LA	-0.0713	0.0150	-4.75	0.000	***	-0.0194	0.049
Miami	-0.1241	0.0157	-7.89	0.000	***	-0.0330	0.038
Michigan	0.0075	0.0148	0.50	0.615		0.0021	0.045
Minn	-0.1747	0.0167	-10.47	0.000	***	-0.0455	0.032
Nashville	-0.0182	0.0157	-1.16	0.245		-0.0051	0.036
New_England	-0.0987	0.0158	-6.23	0.000	***	-0.0265	0.036
New_Orleans	0.0261	0.0157	1.66	0.097	*	0.0074	0.034
New_York	-0.0712	0.0151	-4.72	0.000	***	-0.0194	0.046
Ohio	0.0071	0.0145	0.49	0.622		0.0020	0.051
Philly	-0.1189	0.0160	-7.44	0.000	***	-0.0317	0.034
Phoenix	-0.0686	0.0163	-4.21	0.000	***	-0.0187	0.033
Pittsburgh	-0.0842	0.0159	-5.29	0.000	***	-0.0228	0.036
Portland	-0.0814	0.0175	-4.64	0.000	***	-0.0220	0.026
Raleigh	-0.0611	0.0149	-4.09	0.000	***	-0.0167	0.045
Richmond	-0.1137	0.0157	-7.24	0.000	***	-0.0304	0.037
San_Anton	-0.0168	0.0165	-1.02	0.309		-0.0047	0.032
San_Diego	-0.1030	0.0151	-6.81	0.000	***	-0.0277	0.047
San_Fran	-0.1563	0.0161	-9.73	0.000	***	-0.0411	0.040
Seattle	-0.0995	0.0169	-5.89	0.000	***	-0.0267	0.030
St_Louis	-0.0483	0.0152	-3.18	0.001	***	-0.0133	0.043
_cons	-1.0663	0.0159	-66.87	0.000	***		

Probit regression. Dependent variable is "attrited in DEP"

* Indicates coefficient is significant at 10-percent level or better

** Indicates coefficient is significant at 5-percent level or better

*** Indicates coefficient is significant at 1-percent level or better

Tier I is omitted category

Number of obs = 459,273   Pseudo R^2 = 0.0390

Source: Derived from PRIDE data files (CNRC, 2007).

Table 75. DEP Attrition Regression results, Recruit Quality Matrix Cells with DEP Members in School Separated

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
unemp_rate	-0.0121	0.0013	-9.51	0.000***	-0.0034	5.238
reclass	0.0097	0.0071	1.37	0.170	0.0027	0.115
enl_bonus	-0.1267	0.0049	-26.03	0.000***	-0.0354	0.546
age_17	-0.0117	0.0065	-1.80	0.072*	-0.0032	0.216
age_19	0.0773	0.0070	11.08	0.000***	0.0219	0.172
age_20	0.1140	0.0083	13.72	0.000***	0.0329	0.105
age_21	0.1118	0.0098	11.40	0.000***	0.0323	0.068
age_22	0.1410	0.0113	12.43	0.000***	0.0413	0.046
age_23p	0.1531	0.0083	18.54	0.000***	0.0446	0.118
married_fem	0.3007	0.0342	8.78	0.000***	0.0936	0.004
single_fem	0.2921	0.0054	54.44	0.000***	0.0872	0.189
married_mal	-0.1328	0.0221	-6.02	0.000***	-0.0349	0.012
blk_only	0.0001	0.0062	0.01	0.992	0.0000	0.191
hsp_only	-0.0034	0.0070	-0.48	0.629	-0.0009	0.143
api_only	-0.0383	0.0075	-5.10	0.000***	-0.0105	0.109
multi	-0.0112	0.0143	-0.78	0.436	-0.0031	0.024
oth_only	-0.0218	0.0302	-0.72	0.470	-0.0060	0.005
days_dep	0.0040	0.0001	54.14	0.000***	0.0011	119.3
days_dep_sq	0.0000	0.0000	-44.91	0.000***	0.0000	26652.0
B_Cell	**0.0388**	**0.0093**	**4.18**	**0.000*****	**0.0109**	**0.071**
Cu_Cell_Grad	**-0.0708**	**0.0068**	**-10.36**	**0.000*****	**-0.0193**	**0.206**
A_Cell_School	**0.3365**	**0.0073**	**46.02**	**0.000*****	**0.1009**	**0.210**
Cu_Cell_School	**0.4243**	**0.0081**	**52.59**	**0.000*****	**0.1324**	**0.135**
SG	0.0501	0.0062	8.04	0.000***	0.0140	0.410
fiveYO	0.0124	0.0077	1.61	0.107	0.0035	0.151
AEF	0.0111	0.0108	1.03	0.301	0.0031	0.062
ATF	-0.0705	0.0193	-3.66	0.000***	-0.0190	0.014
NF	-0.1520	0.0118	-12.88	0.000***	-0.0398	0.056
GTEP	-0.1528	0.0156	-9.79	0.000***	-0.0398	0.024
TEP	-0.0274	0.0156	-1.76	0.079*	-0.0075	0.021
twoYO	0.0078	0.0385	0.20	0.839	0.0022	0.003
threeYO	-0.0058	0.0245	-0.24	0.812	-0.0016	0.008
NCSA	-0.0422	0.0231	-1.83	0.068*	-0.0115	0.010
NPSB	-0.0984	0.0442	-2.22	0.026**	-0.0262	0.002
other_ep	-0.0579	0.0176	-3.29	0.001***	-0.0157	0.016
E2	-0.5358	0.0178	-30.13	0.000***	-0.1162	0.022
E3	-0.2140	0.0160	-13.34	0.000***	-0.0542	0.022
FY1999	0.0486	0.0090	5.40	0.000***	0.0137	0.135

Variable	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
FY2000	0.0703	0.0090	7.77	0.000	***	0.0200	0.141
FY2001	0.0813	0.0089	9.10	0.000	***	0.0231	0.142
FY2002	0.1233	0.0092	13.45	0.000	***	0.0356	0.138
FY2003	0.2080	0.0096	21.60	0.000	***	0.0616	0.117
FY2004	0.2185	0.0097	22.45	0.000	***	0.0650	0.111
FY2005	0.1810	0.0097	18.64	0.000	***	0.0533	0.101
Chicago	-0.0472	0.0153	-3.08	0.002	***	-0.0129	0.041
Dallas	-0.0368	0.0150	-2.45	0.014	**	-0.0101	0.047
Denver	-0.0361	0.0169	-2.14	0.033	**	-0.0099	0.029
Houston	-0.0688	0.0153	-4.51	0.000	***	-0.0186	0.043
Jax	-0.0432	0.0160	-2.69	0.007	***	-0.0118	0.033
LA	-0.0512	0.0151	-3.39	0.001	***	-0.0140	0.049
Miami	-0.1112	0.0158	-7.03	0.000	***	-0.0296	0.038
Michigan	0.0070	0.0149	0.47	0.639		0.0019	0.045
Minn	-0.1684	0.0168	-10.05	0.000	***	-0.0436	0.032
Nashville	-0.0133	0.0157	-0.85	0.397		-0.0037	0.036
New_England	-0.0865	0.0159	-5.43	0.000	***	-0.0232	0.036
New_Orleans	0.0272	0.0158	1.72	0.086	*	0.0076	0.034
New_York	-0.0480	0.0152	-3.17	0.002	***	-0.0131	0.046
Ohio	0.0056	0.0145	0.39	0.700		0.0016	0.051
Philly	-0.0983	0.0161	-6.13	0.000	***	-0.0263	0.034
Phoenix	-0.0672	0.0164	-4.10	0.000	***	-0.0182	0.033
Pittsburgh	-0.0760	0.0160	-4.76	0.000	***	-0.0205	0.036
Portland	-0.0758	0.0176	-4.30	0.000	***	-0.0204	0.026
Raleigh	-0.0342	0.0150	-2.28	0.023	**	-0.0094	0.045
Richmond	-0.0844	0.0158	-5.35	0.000	***	-0.0227	0.037
San_Anton	-0.0193	0.0166	-1.16	0.246		-0.0053	0.032
San_Diego	-0.0727	0.0152	-4.79	0.000	***	-0.0196	0.047
San_Fran	-0.1337	0.0161	-8.28	0.000	***	-0.0352	0.040
Seattle	-0.1005	0.0170	-5.92	0.000	***	-0.0268	0.030
St_Louis	-0.0478	0.0153	-3.14	0.002	***	-0.0130	0.043
_cons	-1.2032	0.0163	-73.60	0.000	***		

Probit regression. Dependent variable is "attrited in DEP"
* Indicates coefficient is significant at 10-percent level or better
** Indicates coefficient is significant at 5-percent level or better
*** Indicates coefficient is significant at 1-percent level or better
A-Cell members not in school is omitted category
Number of obs = 459,273   Pseudo R^2 = 0.0478

Source: Derived from PRIDE data files (CNRC, 2007).

Table 76. DEP Attrition Regression Results, Education Credentials and Enlistment Programs

Variable	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
unemp_rate	-0.0114	0.0013	-8.92	0.000***	-0.0031	5.23789
reclass	0.0124	0.0071	1.75	0.080*	0.0035	0.115
enl_bonus	-0.1338	0.0049	-27.54	0.000***	-0.0373	0.546
age_17	0.0023	0.0066	0.36	0.722	0.0006	0.216
age_19	0.0552	0.0070	7.86	0.000***	0.0156	0.172
age_20	0.0852	0.0084	10.17	0.000***	0.0243	0.105
age_21	0.0832	0.0099	8.41	0.000***	0.0238	0.068
age_22	0.1108	0.0114	9.68	0.000***	0.0321	0.046
age_23p	0.1160	0.0086	13.44	0.000***	0.0334	0.118
married_fem	0.3014	0.0343	8.78	0.000***	0.0939	0.004
single_fem	0.2948	0.0054	54.97	0.000***	0.0880	0.189
married_mal	-0.1386	0.0222	-6.26	0.000***	-0.0363	0.012
blk_only	0.0038	0.0062	0.62	0.538	0.0011	0.191
hsp_only	-0.0019	0.0070	-0.27	0.786	-0.0005	0.143
api_only	-0.0386	0.0075	-5.13	0.000***	-0.0106	0.109
multi	-0.0130	0.0143	-0.91	0.363	-0.0036	0.024
oth_only	-0.0220	0.0302	-0.73	0.466	-0.0061	0.005
days_dep	0.0039	0.0001	54.05	0.000***	0.0011	119.3
days_dep_sq	0.0000	0.0000	-43.49	0.000***	0.0000	26652.0
afqt	0.0003	0.0002	1.96	0.050**	0.0001	59.459
mast_deg_I	**0.1009**	**0.1029**	**0.98**	**0.327**	**0.0292**	**0.000**
bach_deg_I	**0.1418**	**0.0193**	**7.35**	**0.000*** **	**0.0417**	**0.014**
assoc_deg_I	**-0.0599**	**0.0273**	**-2.19**	**0.028** **	**-0.0162**	**0.007**
hs_senior_I	**0.3294**	**0.0067**	**48.83**	**0.000*** **	**0.0962**	**0.308**
fail_exit_I	**-0.0760**	**0.0844**	**-0.90**	**0.368**	**-0.0204**	**0.001**
adulted_15cred_I	**0.6849**	**0.0107**	**64.00**	**0.000*** **	**0.2337**	**0.037**
adult_hs_I	**0.0560**	**0.0193**	**2.90**	**0.004*** **	**0.0159**	**0.014**
sem_college_I	**0.0582**	**0.0153**	**3.82**	**0.000*** **	**0.0165**	**0.022**
home_school_I	**-0.0205**	**0.0317**	**-0.65**	**0.517**	**-0.0057**	**0.006**
GED_II	**0.0822**	**0.0116**	**7.09**	**0.000*** **	**0.0236**	**0.040**
other_non_trad_II	**0.0508**	**0.1057**	**0.48**	**0.631**	**0.0144**	**0.000**
corr_school_II	**0.0302**	**0.0798**	**0.38**	**0.705**	**0.0085**	**0.001**
cert_attnd_II	**-0.2910**	**0.1419**	**-2.05**	**0.040** **	**-0.0707**	**0.000**
ngycp_II	**0.1080**	**0.0364**	**2.97**	**0.003*** **	**0.0313**	**0.004**
no_cred_III	**0.0522**	**0.0136**	**3.83**	**0.000*** **	**0.0148**	**0.029**
SG	**0.0495**	**0.0062**	**7.94**	**0.000*** **	**0.0138**	**0.410**
fiveYO	**0.0138**	**0.0077**	**1.79**	**0.073***	**0.0039**	**0.151**
AEF	**0.0121**	**0.0114**	**1.06**	**0.289**	**0.0034**	**0.062**
ATF	**-0.0729**	**0.0195**	**-3.74**	**0.000*** **	**-0.0196**	**0.014**

Variable	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
NF	**-0.1483**	**0.0130**	**-11.44**	**0.000*****	**-0.0389**	**0.056**
GTEP	**-0.1481**	**0.0156**	**-9.50**	**0.000*****	**-0.0386**	**0.024**
TEP	**-0.0254**	**0.0156**	**-1.63**	**0.104**	**-0.0070**	**0.021**
twoYO	**0.0049**	**0.0385**	**0.13**	**0.899**	**0.0014**	**0.003**
threeYO	**0.0027**	**0.0245**	**0.11**	**0.913**	**0.0007**	**0.008**
NCSA	**-0.0311**	**0.0231**	**-1.34**	**0.179**	**-0.0085**	**0.010**
NPSB	**-0.0971**	**0.0442**	**-2.20**	**0.028****	**-0.0259**	**0.002**
other_ep	**-0.0569**	**0.0176**	**-3.23**	**0.001*****	**-0.0154**	**0.016**
E2	-0.5310	0.0178	-29.80	0.000***	-0.1154	0.022
E3	-0.2172	0.0164	-13.23	0.000***	-0.0549	0.022
FY1999	0.0505	0.0090	5.61	0.000***	0.0143	0.135
FY2000	0.0714	0.0090	7.90	0.000***	0.0203	0.141
FY2001	0.0819	0.0089	9.17	0.000***	0.0233	0.142
FY2002	0.1220	0.0092	13.30	0.000***	0.0351	0.138
FY2003	0.2070	0.0096	21.46	0.000***	0.0613	0.117
FY2004	0.2222	0.0097	22.80	0.000***	0.0661	0.111
FY2005	0.1877	0.0097	19.29	0.000***	0.0554	0.101
Chicago	-0.0514	0.0153	-3.35	0.001***	-0.0140	0.041
Dallas	-0.0460	0.0150	-3.06	0.002***	-0.0125	0.047
Denver	-0.0529	0.0169	-3.13	0.002***	-0.0144	0.029
Houston	-0.0669	0.0153	-4.38	0.000***	-0.0181	0.043
Jax	-0.0536	0.0161	-3.34	0.001***	-0.0146	0.033
LA	-0.0703	0.0151	-4.64	0.000***	-0.0190	0.049
Miami	-0.1158	0.0158	-7.32	0.000***	-0.0307	0.038
Michigan	-0.0035	0.0149	-0.24	0.813	-0.0010	0.045
Minn	-0.1690	0.0168	-10.08	0.000***	-0.0437	0.032
Nashville	-0.0208	0.0157	-1.32	0.187	-0.0057	0.036
New_England	-0.0924	0.0159	-5.80	0.000***	-0.0247	0.036
New_Orleans	0.0136	0.0158	0.86	0.390	0.0038	0.034
New_York	-0.0505	0.0152	-3.33	0.001***	-0.0138	0.046
Ohio	-0.0032	0.0145	-0.22	0.828	-0.0009	0.051
Philly	-0.0995	0.0161	-6.20	0.000***	-0.0265	0.034
Phoenix	-0.0887	0.0164	-5.41	0.000***	-0.0238	0.033
Pittsburgh	-0.0752	0.0160	-4.70	0.000***	-0.0203	0.036
Portland	-0.0931	0.0176	-5.28	0.000***	-0.0249	0.026
Raleigh	-0.0446	0.0150	-2.97	0.003***	-0.0122	0.045
Richmond	-0.0877	0.0158	-5.56	0.000***	-0.0235	0.037
San_Anton	-0.0237	0.0166	-1.42	0.155	-0.0065	0.032
San_Diego	-0.0939	0.0152	-6.16	0.000***	-0.0251	0.047
San_Fran	-0.1511	0.0162	-9.34	0.000***	-0.0395	0.040
Seattle	-0.1130	0.0170	-6.65	0.000***	-0.0300	0.030
St_Louis	-0.0588	0.0153	-3.85	0.000***	-0.0160	0.043
_cons	-1.2321	0.0175	-70.28	0.000***		

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**

Probit regression. Dependent variable is "attrited in DEP"

Education credential Tier group denoted by Roman numeral

* Indicates coefficient is significant at 10-percent level or better

** Indicates coefficient is significant at 5-percent level or better

*** Indicates coefficient is significant at 1-percent level or better

Traditional high school graduate and GENDET are omitted categories

Number of obs = 459,273   Pseudo R^2 = 0.0501

Source: Derived from PRIDE data files (CNRC, 2007).

Table 77. DEP Attrition Regression results, women and traditional jobs

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**		**Partial Effects**	**Mean**
unemp_rate	-0.0070	0.0027	-2.62	0.009	***	-0.0022	5.260
reclass	0.0943	0.0142	6.65	0.000	***	0.0311	0.142
enl_bonus	-0.1568	0.0103	-15.21	0.000	***	-0.0509	0.543
age_17	-0.0093	0.0139	-0.67	0.502		-0.0030	0.267
age_19	0.0516	0.0157	3.28	0.001	***	0.0169	0.158
age_20	0.0387	0.0190	2.04	0.042	**	0.0126	0.094
age_21	0.0688	0.0226	3.05	0.002	***	0.0227	0.059
age_22	0.0509	0.0268	1.90	0.058	*	0.0167	0.039
age_23p	0.0339	0.0200	1.69	0.090	*	0.0110	0.103
married	0.0741	0.0341	2.17	0.030	**	0.0245	0.022
blk_only	-0.0874	0.0131	-6.65	0.000	***	-0.0278	0.237
hsp_only	-0.0531	0.0153	-3.47	0.001	***	-0.0169	0.149
api_only	-0.0412	0.0163	-2.53	0.011	**	-0.0132	0.112
multi	-0.0807	0.0302	-2.67	0.008	***	-0.0254	0.026
oth_only	-0.1031	0.0736	-1.40	0.162		-0.0322	0.004
days_dep	0.0098	0.0002	61.63	0.000	***	0.0032	131.5
days_dep_sq	0.0000	0.0000	-47.80	0.000	***	0.0000	30964.6
afqt	0.0011	0.0003	3.82	0.000	***	0.0004	57.844
mast_deg_I	-0.1164	0.2038	-0.57	0.568		-0.0361	0.001
bach_deg_I	0.0783	0.0399	1.96	0.050	**	0.0259	0.017
assoc_deg_I	-0.0521	0.0550	-0.95	0.343		-0.0166	0.008
hs_senior_I	0.1727	0.0144	12.01	0.000	***	0.0568	0.326
fail_exit_I	-0.1784	0.1897	-0.94	0.347		-0.0541	0.001
adulted_15cred_I	0.5323	0.0288	18.46	0.000	***	0.1944	0.025
adult_hs_I	0.1086	0.0446	2.44	0.015	**	0.0363	0.012
sem_college_I	0.1085	0.0343	3.16	0.002	***	0.0362	0.021
home_school_I	-0.0944	0.0851	-1.11	0.267		-0.0295	0.004
GED_II	0.1243	0.0370	3.36	0.001	***	0.0417	0.017
other_non_trad_II	0.0082	0.2769	0.03	0.976		0.0026	0.000
corr_school_II	-0.1041	0.1970	-0.53	0.597		-0.0325	0.001
ngycp_II	0.0159	0.1076	0.15	0.883		0.0052	0.002
no_cred_III	0.0709	0.0498	1.42	0.155		0.0234	0.010
E2	-0.5978	0.0369	-16.22	0.000	***	-0.1538	0.023
E3	-0.2217	0.0331	-6.70	0.000	***	-0.0664	0.025
FY1999	0.0804	0.0195	4.12	0.000	***	0.0264	0.142
FY2000	0.1133	0.0198	5.73	0.000	***	0.0375	0.144
FY2001	0.0587	0.0194	3.03	0.002	***	0.0192	0.147

Variable	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
FY2002	0.1227	0.0195	6.29	0.000	***	0.0407	0.150
FY2003	0.2300	0.0218	10.54	0.000	***	0.0785	0.090
FY2004	0.1710	0.0210	8.14	0.000	***	0.0575	0.107
FY2005	0.1759	0.0207	8.50	0.000	***	0.0593	0.099
Chicago	-0.1349	0.0339	-3.98	0.000	***	-0.0417	0.039
Dallas	-0.0633	0.0336	-1.88	0.060	*	-0.0200	0.042
Denver	-0.0761	0.0368	-2.07	0.039	**	-0.0240	0.029
Houston	-0.1108	0.0346	-3.21	0.001	***	-0.0346	0.037
Jax	-0.0561	0.0343	-1.64	0.102		-0.0178	0.035
LA	-0.1344	0.0325	-4.14	0.000	***	-0.0416	0.052
Miami	-0.1227	0.0340	-3.61	0.000	***	-0.0381	0.038
Michigan	-0.0372	0.0328	-1.13	0.257		-0.0119	0.044
Minn	-0.2201	0.0369	-5.96	0.000	***	-0.0661	0.031
Nashville	-0.0043	0.0345	-0.12	0.901		-0.0014	0.035
New_England	-0.1447	0.0350	-4.14	0.000	***	-0.0446	0.034
New_Orleans	0.0485	0.0338	1.44	0.151		0.0159	0.037
New_York	-0.0878	0.0331	-2.65	0.008	***	-0.0276	0.047
Ohio	0.0168	0.0317	0.53	0.596		0.0054	0.050
Philly	-0.1775	0.0351	-5.05	0.000	***	-0.0541	0.034
Phoenix	-0.1300	0.0350	-3.72	0.000	***	-0.0403	0.036
Pittsburgh	-0.1389	0.0348	-3.99	0.000	***	-0.0429	0.035
Portland	-0.0965	0.0376	-2.57	0.010	***	-0.0302	0.027
Raleigh	-0.0157	0.0322	-0.49	0.625		-0.0050	0.047
Richmond	-0.0411	0.0336	-1.22	0.222		-0.0131	0.039
San_Anton	-0.0573	0.0363	-1.58	0.114		-0.0182	0.032
San_Diego	-0.1368	0.0327	-4.19	0.000	***	-0.0424	0.050
San_Fran	-0.1834	0.0346	-5.30	0.000	***	-0.0559	0.041
Seattle	-0.1358	0.0365	-3.72	0.000	***	-0.0420	0.031
St_Louis	-0.0819	0.0343	-2.39	0.017	**	-0.0258	0.038
trad_fem	**-0.0419**	**0.0099**	**-4.22**	**0.000**	*******	**-0.0135**	**0.380**
_cons	-1.2840	0.0374	-34.35	0.000	***		

Probit regression. Dependent variable is "attrited in DEP"
Education credential Tier group denoted by Roman numeral
* Indicates coefficient is significant at 10-percent level or better
** Indicates coefficient is significant at 5-percent level or better
*** Indicates coefficient is significant at 1-percent level or better
Nontraditional female ratings is omitted categories
Number of obs = 88,392   Pseudo R^2 = 0.0886
Source: Derived from PRIDE data files (CNRC, 2007).

Table 78. DEP Attrition Regression Results, Women and All Traditional Ratings

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**		**Partial Effects**	**Mean**
unemp_rate	-0.0073	0.0027	-2.74	0.006	***	-0.0023	5.260
reclass	0.1113	0.0143	7.78	0.000	***	0.0368	0.142
enl_bonus	-0.1526	0.0104	-14.65	0.000	***	-0.0494	0.543
age_17	-0.0086	0.0139	-0.62	0.536		-0.0028	0.267
age_19	0.0512	0.0157	3.25	0.001	***	0.0167	0.158
age_20	0.0371	0.0191	1.95	0.051	*	0.0121	0.094
age_21	0.0683	0.0226	3.02	0.003	***	0.0225	0.059
age_22	0.0533	0.0268	1.99	0.047	**	0.0175	0.039
age_23p	0.0311	0.0200	1.55	0.121		0.0101	0.103
married	0.0680	0.0342	1.99	0.047	**	0.0224	0.022
blk_only	-0.0934	0.0132	-7.09	0.000	***	-0.0296	0.237
hsp_only	-0.0568	0.0153	-3.70	0.000	***	-0.0181	0.149
api_only	-0.0450	0.0163	-2.76	0.006	***	-0.0144	0.112
multi	-0.0877	0.0303	-2.90	0.004	***	-0.0275	0.026
oth_only	-0.1034	0.0737	-1.40	0.161		-0.0322	0.004
days_dep	0.0099	0.0002	61.83	0.000	***	0.0032	131.5
days_dep_sq	0.0000	0.0000	-47.87	0.000	***	0.0000	30964.6
afqt	0.0018	0.0003	5.86	0.000	***	0.0006	57.844
mast_deg_I	-0.0131	0.2109	-0.06	0.951		-0.0042	0.001
bach_deg_I	0.1098	0.0401	2.74	0.006	***	0.0366	0.017
assoc_deg_I	-0.0569	0.0551	-1.03	0.301		-0.0180	0.008
hs_senior_I	0.1714	0.0144	11.92	0.000	***	0.0563	0.326
fail_exit_I	-0.1731	0.1898	-0.91	0.362		-0.0526	0.001
adulted_15cred_I	0.5285	0.0289	18.32	0.000	***	0.1928	0.025
adult_hs_I	0.1044	0.0446	2.34	0.019	**	0.0348	0.012
sem_college_I	0.1056	0.0343	3.08	0.002	***	0.0352	0.021
home_school_I	-0.0945	0.0851	-1.11	0.267		-0.0296	0.004
GED_II	0.1162	0.0371	3.14	0.002	***	0.0388	0.017
other_non_trad_II	0.0216	0.2791	0.08	0.938		0.0070	0.000
corr_school_II	-0.1062	0.1971	-0.54	0.590		-0.0331	0.001
ngycp_II	0.0140	0.1075	0.13	0.896		0.0046	0.002
no_cred_III	0.0600	0.0499	1.20	0.229		0.0197	0.010
E2	-0.5932	0.0369	-16.07	0.000	***	-0.1527	0.023
E3	-0.2132	0.0331	-6.43	0.000	***	-0.0640	0.025
FY1999	0.0775	0.0195	3.96	0.000	***	0.0254	0.142
FY2000	0.1078	0.0198	5.44	0.000	***	0.0356	0.144
FY2001	0.0536	0.0194	2.76	0.006	***	0.0175	0.147
FY2002	0.1188	0.0196	6.07	0.000	***	0.0394	0.150

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
FY2003	0.2224	0.0219	10.16	0.000***	0.0757	0.090
FY2004	0.1617	0.0211	7.67	0.000***	0.0542	0.107
FY2005	0.1674	0.0208	8.06	0.000***	0.0563	0.099
Chicago	-0.1341	0.0339	-3.95	0.000***	-0.0415	0.039
Dallas	-0.0602	0.0336	-1.79	0.074*	-0.0191	0.042
Denver	-0.0701	0.0369	-1.90	0.058*	-0.0221	0.029
Houston	-0.1091	0.0346	-3.15	0.002***	-0.0340	0.037
Jax	-0.0552	0.0343	-1.61	0.108	-0.0175	0.035
LA	-0.1346	0.0325	-4.14	0.000***	-0.0417	0.052
Miami	-0.1227	0.0340	-3.61	0.000***	-0.0381	0.038
Michigan	-0.0333	0.0329	-1.01	0.311	-0.0106	0.044
Minn	-0.2168	0.0370	-5.86	0.000***	-0.0651	0.031
Nashville	-0.0005	0.0345	-0.01	0.989	-0.0001	0.035
New_England	-0.1452	0.0351	-4.14	0.000***	-0.0447	0.034
New_Orleans	0.0491	0.0338	1.45	0.146	0.0161	0.037
New_York	-0.0911	0.0332	-2.75	0.006***	-0.0286	0.047
Ohio	0.0176	0.0317	0.56	0.578	0.0057	0.050
Philly	-0.1767	0.0352	-5.02	0.000***	-0.0538	0.034
Phoenix	-0.1266	0.0350	-3.62	0.000***	-0.0393	0.036
Pittsburgh	-0.1396	0.0349	-4.00	0.000***	-0.0431	0.035
Portland	-0.0901	0.0376	-2.39	0.017**	-0.0282	0.027
Raleigh	-0.0142	0.0322	-0.44	0.660	-0.0045	0.047
Richmond	-0.0367	0.0336	-1.09	0.275	-0.0117	0.039
San_Anton	-0.0528	0.0363	-1.45	0.146	-0.0168	0.032
San_Diego	-0.1336	0.0327	-4.08	0.000***	-0.0414	0.050
San_Fran	-0.1786	0.0346	-5.15	0.000***	-0.0544	0.041
Seattle	-0.1260	0.0366	-3.44	0.001***	-0.0390	0.031
St_Louis	-0.0759	0.0343	-2.21	0.027**	-0.0239	0.038
AC	**-0.0332**	**0.0395**	**-0.84**	**0.400**	**-0.0106**	**0.014**
AG	**-0.0733**	**0.0743**	**-0.99**	**0.324**	**-0.0231**	**0.004**
AZ	**0.0451**	**0.0484**	**0.93**	**0.351**	**0.0148**	**0.009**
CS	**0.0564**	**0.0260**	**2.16**	**0.030****	**0.0185**	**0.035**
CTI	**-0.4782**	**0.0464**	**-10.30**	**0.000*****	**-0.1288**	**0.014**
CTR	**-0.1599**	**0.0656**	**-2.44**	**0.015****	**-0.0488**	**0.005**
HM	**-0.0431**	**0.0150**	**-2.88**	**0.004*****	**-0.0138**	**0.120**
IS	**-0.1863**	**0.0506**	**-3.68**	**0.000*****	**-0.0564**	**0.009**
IT	**-0.0846**	**0.0236**	**-3.58**	**0.000*****	**-0.0266**	**0.044**
MC	**-0.0964**	**0.0518**	**-1.86**	**0.063***	**-0.0301**	**0.008**
MU	**-0.7293**	**0.1675**	**-4.35**	**0.000*****	**-0.1739**	**0.001**
OS	**-0.0435**	**0.0285**	**-1.53**	**0.127**	**-0.0139**	**0.028**
PC	**0.2737**	**0.1146**	**2.39**	**0.017****	**0.0954**	**0.002**
PS	**-0.0215**	**0.0346**	**-0.62**	**0.534**	**-0.0069**	**0.018**

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**		**Partial Effects**	**Mean**
RP	**-0.0784**	**0.1078**	**-0.73**	**0.467**		**-0.0246**	**0.002**
SH	**0.1274**	**0.0450**	**2.83**	**0.005**	*******	**0.0427**	**0.010**
SK	**0.0300**	**0.0299**	**1.00**	**0.316**		**0.0098**	**0.025**
YN	**-0.0135**	**0.0274**	**-0.49**	**0.623**		**-0.0043**	**0.032**
_cons	-1.3233	0.0377	-35.11	0.000	***		

Probit regression. Dependent variable is "attrited in DEP"

Education credential Tier group denoted by Roman numeral

* Indicates coefficient is significant at 10-percent level or better

** Indicates coefficient is significant at 5-percent level or better

*** Indicates coefficient is significant at 1-percent level or better

Nontraditional female ratings is omitted categories

Number of obs = 88,392   Pseudo R^2 = 0.0903

Source: Derived from PRIDE data files (CNRC, 2007).

APPENDIX D – RTC TABULAR DATA

Table 79. Number of RTC Recruits by Education Credential and Year of Entry, Fiscal Years 2001-2005

	Fiscal Year					
Education Credential	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Master's Degree	12	16	25	32	23	108
Bachelor's Degree	391	550	801	1,009	876	3,627
Associate's Degree	267	356	421	493	476	2,013
High School Diploma	40,809	35,455	33,888	34,036	33,332	177,520
Adult Education Diploma	1,818	1,565	970	607	487	5,447
Semester College/Job Corps	2,067	1,867	1,638	1,264	1,013	7,849
Complete High School Fail Exit Exam	53	63	99	49	38	302
Home School Diploma	450	169	102	99	78	898
GED Certificate	2,805	1,985	1,307	1,058	950	8,105
Correspondence Courses, et al.	26	28	58	51	42	205
Certificate of Attendence	15	4	11	20	10	60
NGYCP or SCNGC	330	306	276	267	132	1,311
Other Non-Traditional Diploma					54	55
Non High School Graduate	2,248	1,510	911	625	456	5,750
Total	51,291	43,875	40,507	39,610	37,967	213,250

Source: Derived from PRIDE data files (CNRC, 2007).

Table 80. Percent Distribution of RTC Recruits by Education Credential and Year of Entry, Fiscal Years 2001-2005

	Fiscal Year					
Education Credential	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Master's Degree	0.0	0.0	0.1	0.1	0.1	0.1
Bachelor's Degree	0.8	1.3	2.0	2.5	2.3	1.7
Associate's Degree	0.5	0.8	1.0	1.2	1.3	0.9
High School Diploma	79.6	80.8	83.7	85.9	87.8	83.2
Adult Education Diploma	3.5	3.6	2.4	1.5	1.3	2.6
Semester College/Job Corps	4.0	4.3	4.0	3.2	2.7	3.7
Complete High School Fail Exit Exam	0.1	0.1	0.2	0.1	0.1	0.1
Home School Diploma	0.9	0.4	0.3	0.2	0.2	0.4
GED Certificate	5.5	4.5	3.2	2.7	2.5	3.8
Correspondence Courses, et al.	0.1	0.1	0.1	0.1	0.1	0.1
Certificate of Attendence	0.0	0.0	0.0	0.1	0.0	0.0
NGYCP or SCNGC	0.6	0.7	0.7	0.7	0.3	0.6
Other Non-Traditional Diploma	0.0	0.0	0.0	0.0	0.1	0.0
Non High School Graduate	4.4	3.4	2.2	1.6	1.2	2.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 81. Number of RTC Recruits by AFQT Category and Year of Entry, Fiscal Years 2001-2005

AFQT Categories	Fiscal Year FY2001	FY2002	FY2003	FY2004	FY2005	Total
Cat I (93 - 99)	2,009	2,144	2,246	2,613	2,482	11,494
Cat II (65 - 92)	16,421	14,810	13,843	14,780	13,929	73,783
Cat IIIA (50 - 64)	14,099	11,698	10,566	10,323	10,313	56,999
Cat IIIB (31 - 49)	18,762	15,223	13,852	11,894	11,243	70,974
Total	51,291	43,875	40,507	39,610	37,967	213,250

Source: Derived from PRIDE data files (CNRC, 2007).

Table 82. Percent Distribution of RTC Recruits by AFQT Category and Year of Entry, Fiscal Years 2001-2005

AFQT Categories	Fiscal Year FY2001	FY2002	FY2003	FY2004	FY2005	Total
Cat I (93 - 99)	3.9	4.9	5.5	6.6	6.5	5.4
Cat II (65 - 92)	32.0	33.8	34.2	37.3	36.7	34.6
Cat IIIA (50 - 64)	27.5	26.7	26.1	26.1	27.2	26.7
Cat IIIB (31 - 49)	36.6	34.7	34.2	30.0	29.6	33.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 83. Number of RTC Recruits by Recruit Quality Matrix Cell and Year of Entry, Fiscal Years 2001-2005

Recruit Quality Matrix Cell	Fiscal Year FY2001	FY2002	FY2003	FY2004	FY2005	Total
A-Cell	27,555	25,152	24,403	25,882	25,145	128,137
B-Cell	4,968	3,497	2,235	1,829	1,571	14,100
Cu-Cell	18,762	15,222	13,852	11,820	11,194	70,850
Total	51,285	43,871	40,490	39,531	37,910	213,087

Source: Derived from PRIDE data files (CNRC, 2007).

Table 84. Percent Distribution of RTC Recruits by Recruit Quality Matrix Cell and Year of Entry, Fiscal Years 2001-2005

Recruit Quality Matrix Cell	Fiscal Year					
	FY2001	FY2002	FY2003	FY2004	FY2005	Total
A-Cell	53.7	57.3	60.3	65.5	66.3	60.1
B-Cell	9.7	8.0	5.5	4.6	4.1	6.6
Cu-Cell	36.6	34.7	34.2	29.9	29.5	33.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 85. Number of RTC Recruits by Education Tier and Year of Entry, Fiscal Years 2001-2005

	Fiscal Year					
Education Tiers	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Tier I	46,323	40,377	38,272	37,707	36,347	199,026
Tier II	2,713	1,947	1,325	1,254	1,160	8,399
Tier III	2,255	1,551	910	649	460	5,825
Total	51,291	43,875	40,507	39,610	37,967	213,250

Source: Derived from PRIDE data files (CNRC, 2007).

Table 86. Percent Distribution of RTC Recruits by Education Tier and Year of Entry, Fiscal Years 2001-2005

	Fiscal Year					
Education Tiers	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Tier I	90.3	92.0	94.5	95.2	95.7	93.3
Tier II	5.3	4.4	3.3	3.2	3.1	3.9
Tier III	4.4	3.5	2.2	1.6	1.2	2.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 87. Number of RTC Recruits by Gender and Year of Entry, Fiscal Years 2001-2005

	Fiscal Year					
Recruits	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Men	41,935	36,314	33,537	33,049	31,828	176,663
Women	9,356	7,561	6,970	6,561	6,139	36,587
Total	51,291	43,875	40,507	39,610	37,967	213,250

Source: Derived from PRIDE data files (CNRC, 2007).

Table 88. Percent Distribution of RTC Recruits by Gender and Year of Entry, Fiscal Years 2001-2005

	Fiscal Year					
Recruits	FY2001	FY2002	FY2003	FY2004	FY2005	Total
Men	81.8	82.8	82.8	83.4	83.8	82.8
Women	18.2	17.2	17.2	16.6	16.2	17.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 89. Number of RTC Recruits by Race/Ethnicity and Year of Entry, Fiscal Years 2001-2005

	Fiscal Year					
Race/Ethnicity	FY2001	FY2002	FY2003	FY2004	FY2005	Total
White	27,369	24,765	20,491	20,011	18,415	111,051
Black	10,716	7,942	7,102	7,254	6,405	39,419
Hispanic	7,712	6,525	6,453	5,074	4,711	30,475
API/NatAm	5,000	4,256	4,536	5,072	5,468	24,332
Other	494	387	1,925	2,199	2,968	7,973
Total	51,291	43,875	40,507	39,610	37,967	213,250

Notes: "API/NatAm" is a combination of Asian, Pacific Islander, and Native American. CNRC groups these races races together when accounting for goals and attainments. "Other" includes members who did not declare a race/ethnicity or declared multiple races/ethnicities.

Source: Derived from PRIDE data files (CNRC, 2007).

Table 90. Percent Distribution of Recruits by Race/Ethnicity and Year of Entry, Fiscal Years 2001-2005

	Fiscal Year					
Race/Ethnicity	FY2001	FY2002	FY2003	FY2004	FY2005	Total
White	53.4	56.4	50.6	50.5	48.5	52.1
Black	20.9	18.1	17.5	18.3	16.9	18.5
Hispanic	15.0	14.9	15.9	12.8	12.4	14.3
API/NatAm	9.7	9.7	11.2	12.8	14.4	11.4
Other	1.0	0.9	4.8	5.6	7.8	3.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Notes: "API/NatAm" is a combination of Asian, Pacific Islander, and Native American. CNRC groups these races races together when accounting for goals and attainments. "Other" includes members who did not declare a race/ethnicity or declared multiple races/ethnicities.

Source: Derived from PRIDE data files (CNRC, 2007).

Table 91. Number of RTC Recruits by Enlistment Program and Year of Entry, Fiscal Years 2001-2005

	Fiscal Year					
Enlistment Programs	FY2001	FY2002	FY2003	FY2004	FY2005	Total
2YO	153	124	63	57		397
3YO	181		103			285
NCSA				999	1,864	2,863
NPSB		34	92	192	467	785
TEP	1,107	1,285	914	744	732	4,782
SF	11,038	8,438	9,991	10,266	9,824	49,557
SG	22,262	19,066	14,618	13,867	14,628	84,441
5YO	8,318	7,617	5,513	6,515	5,305	33,268
AEF	3,567	2,167	1,298	1,382	1,787	10,201
ATF	767	912	562	571	718	3,530
NF	2,803	2,400	2,328	2,277	2,249	12,057
GTEP	451	1,147	4,669	2,310		8,577
Other Programs	644	684	356	430	393	2,507
Total	51,291	43,875	40,507	39,610	37,967	213,250

Source: Derived from PRIDE data files (CNRC, 2007).

Table 92. Percent Distribution of RTC Recruits by Enlistment Program and Year of Entry, Fiscal Years 2001-2005

	Fiscal Year					
Enlistment Programs	FY2001	FY2002	FY2003	FY2004	FY2005	Total
2YO	0.3	0.3	0.2	0.1	0.0	0.2
3YO	0.4		0.3			0.1
NCSA				2.5	4.9	1.3
NPSB		0.1	0.2	0.5	1.2	0.4
TEP	2.2	2.9	2.3	1.9	1.9	2.2
SF	21.5	19.2	24.7	25.9	25.9	23.2
SG	43.4	43.5	36.1	35.0	38.5	39.6
5YO	16.2	17.4	13.6	16.4	14.0	15.6
AEF	7.0	4.9	3.2	3.5	4.7	4.8
ATF	1.5	2.1	1.4	1.4	1.9	1.7
NF	5.5	5.5	5.7	5.7	5.9	5.7
GTEP	0.9	2.6	11.5	5.8	0.0	4.0
Other Programs	1.3	1.6	0.9	1.1	1.0	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 93. Average Number of Days in DEP by Enlistment Program and Year of Entry, Fiscal Years 2001-2005

	Fiscal Year					
Enlistment Programs	FY2001	FY2002	FY2003	FY2004	FY2005	Total
2YO	102.6	109.6	214.3	173.1		132.6
3YO	72.1		105.3			83.9
NCSA				58.7	144.9	114.8
NPSB		12.4	108.3	73.9	57.3	65.4
TEP	60.0	75.8	172.8	154.3	170.5	117.4
SF	60.4	65.2	100.2	96.6	93.0	83.2
SG	81.0	111.3	185.3	208.6	195.3	146.6
5YO	96.8	115.3	186.2	211.6	224.1	158.6
AEF	88.3	109.6	190.8	203.8	152.6	132.8
ATF	64.3	97.7	195.2	191.7	143.0	130.4
NF	141.8	155.5	179.7	178.6	164.4	163.0
GTEP	48.8	58.3	68.2	93.0		72.6
Other Progr	114.5	133.5	235.4	253.2	252.7	182.3
Total	82.4	103.0	150.8	166.2	164.0	129.7

Source: Derived from PRIDE data files (CNRC, 2007).

Table 94. Number of Women in Each Rating by Year of Entry, Fiscal Years 2001-2005 (Descending Order, Traditional Ratings Bold)

	Fiscal Year					
Rating	FY2001	FY2002	FY2003	FY2004	FY2005	Total
AN	1,029	669	1,409	1,118	1,078	5,303
SN	1,109	668	939	1,045	1,064	4,825
HM	**1,227**	**1,131**	**705**	**790**	**582**	**4,435**
MA	139	566	452	186	196	1,539
AV	288	221	283	303	188	1,283
CS	**369**	**350**	**217**	**164**	**135**	**1,235**
IT	**361**	**270**	**170**	**199**	**147**	**1,147**
NF	256	190	177	196	202	1,021
AECF	346	167	108	112	176	909
SK	**312**	**183**	**123**	**136**	**146**	**900**
FN	381	138	167	24		710
OS	**187**	**112**	**90**	**220**	**95**	**704**
AO	200	123	142	124	113	702
CTI	**153**	**237**	**115**	**72**	**106**	**683**
PS	**211**	**127**	**90**	**116**	**93**	**637**
YN	**177**	**128**	**84**	**146**	**92**	**627**
AIRC	133	113	138	63	50	497
CTT	117	137	126	48	47	475
AC	**122**	**89**	**69**	**72**	**113**	**465**
SH	**131**	**133**	**53**	**36**	**51**	**404**
AD	140	123	26	41	64	394
IS	**119**	**100**	**39**	**36**	**76**	**370**
AIRR	95	88	54	49	53	339
MM	82	32	18	35	148	315
STG	104	58	33	31	68	294
QM	106	65	44	20	55	290
GM	96	64	46	42	39	287
MC	**90**	**69**	**23**	**58**	**45**	**285**
AM	16	60	25	40	138	279
AZ	**107**	**52**	**30**	**38**	**43**	**270**
EM	86	69	17	19	53	244
EN	72	42	8	48	65	235
CTR		**49**	**50**	**66**	**56**	**221**
IC	72	42	15	21	63	213
BU	46	53	23	33	38	193
PR	19	59	16	30	34	158
CTM	51	39	27	18	14	149
AS	31	34	21	27	29	142
ABH	29	25	26	32	26	138
ABE	32	40	15	13	26	126
AG	**39**	**16**	**18**	**16**	**29**	**118**
DC	18	17	9	32	39	115

	Fiscal Year					
Rating	FY2001	FY2002	FY2003	FY2004	FY2005	Total
GSM	28	14	6	32	31	111
ABF	35	21	14	15	19	104
HT	10	38	13	8	35	104
EO	14	35	18	12	16	95
AME	13	12	6	10	29	70
GSE	21	21	5	6	15	68
MU	**15**	**10**	**13**	**13**	**12**	**63**
UT	12	14	14	14	9	63
CE	9	11	10	15	12	57
CM	9	8	16	13	8	54
RP	**42**	**9**	**1**	**1**		**53**
PC	**8**	**3**	**16**	**10**	**9**	**46**
SW	13	4	6	10	6	39
EA	7	6	3	7	4	27
MN	11	6	5	2	2	26
MR	1	9	4	3	4	21
Other	410	392	580	475	53	1,910
Total	9,356	7,561	6,970	6,561	6,139	36,587

Note: "Other" ratings are ratings associated with the JOBS program, ratings that could not directly be normalized to a current rating such as CT*, and ratings with only a few members such as SO, SB, ND, and EOD.

Source: Derived from PRIDE data files (CNRC, 2007).

Table 95. Attrition Rate of Women at RTC by Rating and Year of Entry, Fiscal Years 2001-2005 (Descending Order)

	Fiscal Year					
Rating	FY2001	FY2002	FY2003	FY2004	FY2005	Total
MN	27.3	50.0	0.0	0.0	0.0	23.1
HT	20.0	15.8	15.4	0.0	25.7	18.3
QM	17.9	9.2	13.6	25.0	27.3	17.6
UT	16.7	7.1	14.3	35.7	11.1	17.5
EN	13.9	9.5	25.0	18.8	24.6	17.4
AME	30.8	8.3	16.7	20.0	13.8	17.1
GSM	17.9	14.3	33.3	12.5	19.4	17.1
BU	19.6	20.8	13.0	9.1	15.8	16.6
PR	10.5	15.3	18.8	23.3	14.7	16.5
GSE	9.5	4.8	40.0	16.7	33.3	16.2
STG	19.2	12.1	18.2	12.9	14.7	16.0
SK	**20.8**	**10.4**	**16.3**	**13.2**	**11.6**	**15.4**
SW	15.4	0.0	0.0	10.0	50.0	15.4
FN	15.5	15.2	15.6	12.5	0.0	15.4
AO	15.0	16.3	16.2	10.5	17.7	15.1
RP	**11.9**	**22.2**	**100.0**	**0.0**	**0.0**	**15.1**
IS	**19.3**	**8.0**	**15.4**	**16.7**	**15.8**	**14.9**
AS	22.6	14.7	19.0	3.7	13.8	14.8
DC	27.8	11.8	22.2	15.6	7.7	14.8
CTT	17.9	11.7	11.1	20.8	14.9	14.3
MM	11.0	3.1	22.2	14.3	17.6	14.3
MR	0.0	11.1	50.0	0.0	0.0	14.3
SN	14.9	11.8	14.8	13.5	15.1	14.2
SH	**19.1**	**10.5**	**17.0**	**11.1**	**9.8**	**14.1**
IC	15.3	11.9	0.0	19.0	15.9	14.1
AZ	**17.8**	**11.5**	**13.3**	**10.5**	**11.6**	**14.1**
AN	14.9	11.5	14.1	12.4	16.1	14.0
EM	14.0	15.9	5.9	5.3	17.0	13.9
AIRC	12.8	13.3	13.8	14.3	18.0	13.9
CS	**20.1**	**10.3**	**8.3**	**13.4**	**14.1**	**13.7**
AG	**17.9**	**18.8**	**0.0**	**18.8**	**10.3**	**13.6**
CTR	**0.0**	**12.2**	**18.0**	**13.6**	**8.9**	**13.1**
PC	**25.0**	**0.0**	**18.8**	**0.0**	**11.1**	**13.0**
AECF	14.2	9.6	12.0	12.5	13.1	12.7
CE	11.1	9.1	10.0	6.7	25.0	12.3
MA	12.9	11.1	11.5	17.2	12.2	12.3
GM	12.5	14.1	17.4	2.4	12.8	12.2
CTM	11.8	10.3	7.4	11.1	28.6	12.1
YN	**16.4**	**7.0**	**10.7**	**13.7**	**8.7**	**12.0**
AV	15.3	9.5	11.0	7.9	17.6	11.9
AM	12.5	15.0	8.0	15.0	10.1	11.8
AC	**14.8**	**9.0**	**13.0**	**6.9**	**12.4**	**11.6**

	Fiscal Year					
Rating	FY2001	FY2002	FY2003	FY2004	FY2005	Total
MC	**14.4**	**13.0**	**4.3**	**8.6**	**8.9**	**11.2**
HM	**12.1**	**9.7**	**10.2**	**11.1**	**11.5**	**10.9**
AD	12.1	12.2	3.8	9.8	9.4	10.9
ABH	6.9	16.0	19.2	6.3	7.7	10.9
PS	**11.4**	**7.1**	**10.0**	**8.6**	**15.1**	**10.4**
AIRR	13.7	8.0	9.3	4.1	15.1	10.3
IT	**11.4**	**7.4**	**12.9**	**12.6**	**6.8**	**10.3**
ABF	11.4	4.8	7.1	6.7	15.8	9.6
OS	**9.6**	**5.4**	**7.8**	**9.5**	**12.6**	**9.1**
ABE	15.6	5.0	6.7	7.7	7.7	8.7
EO	7.1	8.6	5.6	0.0	18.8	8.4
CTI	**10.5**	**6.3**	**7.0**	**4.2**	**11.3**	**7.9**
NF	8.2	4.7	8.5	8.7	8.9	7.8
EA	14.3	16.7	0.0	0.0	0.0	7.4
CM	11.1	0.0	6.3	0.0	12.5	5.6
MU	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Other	14.6	7.7	12.9	10.5	7.5	11.5
Total	14.5	10.3	12.7	11.8	14.1	12.7

Note: "Other" ratings are ratings associated with the JOBS program, ratings that could not directly be normalized to a current rating such as CT*, and ratings with only a few members such as SO, SB, ND, and EOD.

Source: Derived from PRIDE data files (CNRC, 2007).

APPENDIX E – RTC VARIABLES AND DESCRIPTIVE STATISTICS

Table 96. Variable Descriptions and Descriptive Statistics for RTC Attrition Analysis

Variable	**Description**	**Mean**	**Std. Dev.**	**Min**	**Max**
attrflag	=1 if member attrited from RTC	0.0939	0.2917	0	1
enl_bonus	=1 if member received any type of enlistment bonus	0.6155	0.4865	0	1
age_17	=1 if 17 years old at DEP time	0.2045	0.4033	0	1
age_18	=1 if 18 years old at DEP time	0.2718	0.4449	0	1
age_19	=1 if 19 years old at DEP time	0.1728	0.3780	0	1
age_20	=1 if 20 years old at DEP time	0.1067	0.3087	0	1
age_21	=1 if 21 years old at DEP time	0.0709	0.2567	0	1
age_22	=1 if 22 years old at DEP time	0.0482	0.2141	0	1
age_23p	=1 if 23+ years old at DEP time	0.1251	0.3308	0	1
married_fem	=1 if married female at DEP time	0.0030	0.0551	0	1
single_fem	=1 if single female at DEP time	0.1685	0.3743	0	1
married_mal	=1 if a married male at DEP time	0.0120	0.1091	0	1
single_mal	=1 if a single male at DEP time	0.8164	0.3872	0	1
wht_only	=1 if race/ethnicity is only white	0.5208	0.4996	0	1
blk_only	=1 if race/ethnicity is only black	0.1848	0.3882	0	1
hsp_only	=1 if race/ethnicity is only hispanic	0.1429	0.3500	0	1
api_only	=1 if race/ethnicity is only asian/pacific island/native american	0.1141	0.3179	0	1
oth_only	=1 if member did not identify a race/ethnicity	0.0059	0.0765	0	1
multi	=1 if member identifies more than one race/ethnicity	0.0315	0.1747	0	1
afqt	AFQT Score, continuous variable from 31-99	60.061	18.588	31	99
cat1	=1 if AFQT >=93	0.0539	0.2258	0	1
cat2	=1 if AFQT >=65 and <=92	0.3460	0.4757	0	1
cat3a	=1 if AFQT >=50 and <=64	0.2673	0.4425	0	1
cat3b	=1 if AFQT >=31 and <=49	0.3328	0.4712	0	1

Variable	**Description**	**Mean**	**Std. Dev.**	**Min**	**Max**
A_Cell	=1 if A-Cell	0.4047	0.4908	0	1
B_Cell	=1 if B-Cell	0.0659	0.2481	0	1
Cu_Cell	=1 if Cu-Cell	0.2157	0.4113	0	1
tier1	=1 if Tier I	0.9302	0.2549	0	1
tier2	=1 if Tier II	0.0425	0.2018	0	1
tier3	=1 if Tier III	0.0273	0.1630	0	1
days_dep	Number of days in DEP	129.71	112.25	0	537
days_dep_sq	Number of days in DEP squared	29424.6	37648.7	0	288369
E1	=1 if shipped as an E1	0.9500	0.2180	0	1
E2	=1 if shipped as an E2	0.0284	0.1660	0	1
E3	=1 if shipped as an E3	0.0217	0.1457	0	1
FY2001	=1 if shipped in FY2001	0.2405	0.4274	0	1
FY2002	=1 if shipped in FY2002	0.2057	0.4042	0	1
FY2003	=1 if shipped in FY2003	0.1900	0.3923	0	1
FY2004	=1 if shipped in FY2004	0.1857	0.3889	0	1
FY2005	=1 if shipped in FY2005	0.1780	0.3825	0	1
mast_deg_I	=1 if Masters Degree (code N)	0.0005	0.0225	0	1
bach_deg_I	=1 if Baccalaureate Degree (code K)	0.0170	0.1293	0	1
assoc_deg_I	=1 if Associate Degree (code D)	0.0094	0.0967	0	1
hs_grad_I	=1 if Traditional High School Diploma Graduate (code L)	0.8325	0.3735	0	1
adult_hs_I	=1 if Adult high school diploma graduate (code B)	0.0255	0.1578	0	1
sem_college_I	=1 if completed 15 credits college or Job Corps (code 8)	0.0368	0.1883	0	1
fail_exit_I	=1 if Complete HS, fail secondary school exit exam (code F)	0.0014	0.0376	0	1
home_school_I	=1 if Home school graduate (code H)	0.0042	0.0648	0	1
GED_II	=1 if Test Based Equivalency, GED (code E)	0.0380	0.1912	0	1
other_non_trad_II	=1 if Other Non-Traditional High School Credential (code 5)	0.0003	0.0161	0	1
corr_school_II	=1 if Correspondent or Distance Learning, Home or Independent Study (code 7)	0.0010	0.0310	0	1
cert_attnd_II	=1 if High School Certificate of Attendance or Completion (code J)	0.0003	0.0168	0	1
ngycp_II	=1 if NGYCP or SCNGC (code X)	0.0061	0.0782	0	1
no_cred_III	=1 if Non-High School Graduate (code 1)	0.0270	0.1620	0	1

Variable	**Description**	**Mean**	**Std. Dev.**	**Min**	**Max**
SG	=1 if member in the School Guarantee program, 4 year obligor (current)	0.3960	0.4891	0	1
GENDET	=1 if member in the GENDET program, 4 year obligor (current)	0.2324	0.4224	0	1
fiveYO	=1 if member in the School Guarantee program, 5 year obligor (current)	0.1560	0.3629	0	1
AEF	=1 if member in the SG Advanced Electronic Field program, 6 year obligor (current)	0.0478	0.2134	0	1
ATF	=1 if member in the SG Advanced Technical Field program, 6 year obligor (current)	0.0166	0.1276	0	1
NF	=1 if member in the Nuclear Field program, 6 year obligor (current)	0.0565	0.2310	0	1
GTEP	=1 if member in the GENDET TAR Enlistment Program, 4/5 year obligor (obsolete)	0.0402	0.1965	0	1
twoYO	=1 if member in the GENDET program, 2 year obligor (obsolete)	0.0019	0.0431	0	1
threeYO	=1 if member in the GENDET program, 3 year obligor (obsolete)	0.0013	0.0365	0	1
NCSA	=1 if member in the National Call to Service program (current)	0.0134	0.1151	0	1
NPSB	=1 if member in the Non-Prior Service Basic program (current)	0.0037	0.0606	0	1
TEP	=1 if member in the TAR/FTS Enlistment Program, 4-6 year obligor (current)	0.0224	0.1481	0	1
other_ep	=1 if member in enlisted in JOBS, TASP, HM/SEAL, DIVR (obsolete)	0.0144	0.1189	0	1
Atlanta	=1 if NRD ATLANTA	0.0396	0.1951	0	1
Chicago	=1 if NRD CHICAGO	0.0415	0.1994	0	1
Dallas	=1 if NRD DALLAS	0.0476	0.2130	0	1
Denver	=1 if NRD DENVER	0.0283	0.1658	0	1
Houston	=1 if NRD HOUSTON	0.0438	0.2047	0	1
Jax	=1 if NRD JACKSONVILLE	0.0339	0.1810	0	1
LA	=1 if NRD LOS ANGELES	0.0469	0.2115	0	1
Miami	=1 if NRD MIAMI	0.0418	0.2002	0	1
Michigan	=1 if NRD MICHIGAN	0.0444	0.2059	0	1
Minn	=1 if NRD MINNEAPOLIS	0.0325	0.1774	0	1
Nashville	=1 if NRD NASHVILLE	0.0370	0.1887	0	1

Variable	Description	Mean	Std. Dev.	Min	Max
New_England	=1 if NRD NEW ENGLAND	0.0354	0.1847	0	1
New_Orleans	=1 if NRD NEW ORLEANS	0.0327	0.1777	0	1
New_York	=1 if NRD NEW YORK	0.0415	0.1994	0	1
Ohio	=1 if NRD OHIO	0.0500	0.2180	0	1
Philly	=1 if NRD PHILADELPHIA	0.0351	0.1839	0	1
Phoenix	=1 if NRD PHOENIX	0.0321	0.1762	0	1
Pittsburgh	=1 if NRD PITTSBURGH	0.0340	0.1813	0	1
Portland	=1 if NRD PORTLAND	0.0275	0.1635	0	1
Raleigh	=1 if NRD RALEIGH	0.0458	0.2091	0	1
Richmond	=1 if NRD RICHMOND	0.0367	0.1881	0	1
San_Anton	=1 if NRD SAN ANTONIO	0.0313	0.1742	0	1
San_Diego	=1 if NRD SAN DIEGO	0.0470	0.2116	0	1
San_Fran	=1 if NRD SAN FRANCISCO	0.0418	0.2001	0	1
Seattle	=1 if NRD SEATTLE	0.0299	0.1703	0	1
St_Louis	=1 if NRD ST LOUIS	0.0419	0.2003	0	1
ABE	=1 if enlisted rating is ABE	0.0074	0.0854	0	1
ABF	=1 if enlisted rating is ABF	0.0033	0.0576	0	1
ABH	=1 if enlisted rating is ABH	0.0037	0.0604	0	1
AC	=1 if enlisted rating is AC	0.0094	0.0967	0	1
AD	=1 if enlisted rating is AD	0.0134	0.1151	0	1
AECF	=1 if enlisted rating is AECF	0.0342	0.1817	0	1
AG	=1 if enlisted rating is AG	0.0025	0.0502	0	1
AIRC	=1 if enlisted rating is AIRC	0.0165	0.1273	0	1
AIRR	=1 if enlisted rating is AIRR	0.0140	0.1177	0	1
AM	=1 if enlisted rating is AM	0.0264	0.1603	0	1
AME	=1 if enlisted rating is AME	0.0063	0.0791	0	1
AN	=1 if enlisted rating is AN	0.1165	0.3209	0	1
AO	=1 if enlisted rating is AO	0.0246	0.1550	0	1
AS	=1 if enlisted rating is AS	0.0052	0.0717	0	1
AV	=1 if enlisted rating is AV	0.0469	0.2114	0	1
AZ	=1 if enlisted rating is AZ	0.0050	0.0706	0	1
BU	=1 if enlisted rating is BU	0.0070	0.0836	0	1
CE	=1 if enlisted rating is CE	0.0027	0.0522	0	1
CM	=1 if enlisted rating is CM	0.0040	0.0629	0	1
CS	=1 if enlisted rating is CS	0.0287	0.1670	0	1
CSS	=1 if enlisted rating is CSS	0.0039	0.0623	0	1
CTI	=1 if enlisted rating is CTI	0.0073	0.0854	0	1
CTM	=1 if enlisted rating is CTM	0.0034	0.0581	0	1
CTR	=1 if enlisted rating is CTR	0.0048	0.0689	0	1
CTT	=1 if enlisted rating is CTT	0.0126	0.1116	0	1
DC	=1 if enlisted rating is DC	0.0070	0.0836	0	1

Variable	**Description**	**Mean**	**Std. Dev.**	**Min**	**Max**
EA	=1 if enlisted rating is EA	0.0009	0.0294	0	1
EM	=1 if enlisted rating is EM	0.0137	0.1162	0	1
EN	=1 if enlisted rating is EN	0.0126	0.1117	0	1
EO	=1 if enlisted rating is EO	0.0046	0.0676	0	1
FN	=1 if enlisted rating is FN	0.0289	0.1676	0	1
GM	=1 if enlisted rating is GM	0.0123	0.1104	0	1
GSE	=1 if enlisted rating is GSE	0.0036	0.0602	0	1
GSM	=1 if enlisted rating is GSM	0.0075	0.0862	0	1
HM	=1 if enlisted rating is HM	0.0834	0.2765	0	1
HT	=1 if enlisted rating is HT	0.0121	0.1091	0	1
IC	=1 if enlisted rating is IC	0.0098	0.0986	0	1
IS	=1 if enlisted rating is IS	0.0062	0.0783	0	1
IT	=1 if enlisted rating is IT	0.0220	0.1467	0	1
MA	=1 if enlisted rating is MA	0.0330	0.1786	0	1
MC	=1 if enlisted rating is MC	0.0054	0.0733	0	1
MM	=1 if enlisted rating is MM	0.0214	0.1446	0	1
MMS	=1 if enlisted rating is MMS	0.0108	0.1032	0	1
MN	=1 if enlisted rating is MN	0.0033	0.0574	0	1
MR	=1 if enlisted rating is MR	0.0032	0.0563	0	1
MT	=1 if enlisted rating is MT	0.0041	0.0637	0	1
MU	=1 if enlisted rating is MU	0.0014	0.0378	0	1
NUKE	=1 if enlisted rating is NF	0.0565	0.2310	0	1
OS	=1 if enlisted rating is OS	0.0220	0.1468	0	1
PC	=1 if enlisted rating is PC	0.0007	0.0267	0	1
PR	=1 if enlisted rating is PR	0.0056	0.0748	0	1
PS	=1 if enlisted rating is PS	0.0097	0.0980	0	1
QM	=1 if enlisted rating is QM	0.0077	0.0876	0	1
RP	=1 if enlisted rating is RP	0.0013	0.0360	0	1
SECF	=1 if enlisted rating is SECF	0.0261	0.1594	0	1
SH	=1 if enlisted rating is SH	0.0074	0.0859	0	1
SK	=1 if enlisted rating is SK	0.0160	0.1255	0	1
SKS	=1 if enlisted rating is SKS	0.0015	0.0389	0	1
SN	=1 if enlisted rating is SN	0.0851	0.2790	0	1
SS	=1 if enlisted rating is SS	0.0038	0.0615	0	1
STG	=1 if enlisted rating is STG	0.0090	0.0946	0	1
SW	=1 if enlisted rating is SW	0.0025	0.0501	0	1
UT	=1 if enlisted rating is UT	0.0027	0.0521	0	1
YN	=1 if enlisted rating is YN	0.0117	0.1075	0	1
YNS	=1 if enlisted rating is YNS	0.0018	0.0421	0	1
ZZ	=1 if enlisted in other ratings	0.0118	0.1078	0	1

Source: Derived from PRIDE data files (CNRC, 2007).

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APPENDIX F – RTC ATTRITION REGRESSION ANALYSIS

Table 97. RTC Attrition Regression results, AFQT Categories

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**		**Partial Effects**	**Mean**
enl_bonus	-0.0328	0.0083	-3.94	0.000	***	-0.0052	0.616
age_17	-0.0642	0.0124	-5.19	0.000	***	-0.0100	0.204
age_19	0.0506	0.0117	4.31	0.000	***	0.0082	0.173
age_20	0.0529	0.0138	3.84	0.000	***	0.0087	0.107
age_21	0.0715	0.0160	4.47	0.000	***	0.0118	0.071
age_22	0.0505	0.0190	2.66	0.008	***	0.0083	0.048
age_23p	0.1172	0.0133	8.79	0.000	***	0.0198	0.125
married_fem	0.4210	0.0580	7.26	0.000	***	0.0872	0.003
single_fem	0.2272	0.0097	23.33	0.000	***	0.0400	0.169
married_mal	0.0633	0.0339	1.87	0.062	*	0.0105	0.012
blk_only	-0.1097	0.0111	-9.90	0.000	***	-0.0167	0.185
hsp_only	-0.1215	0.0128	-9.46	0.000	***	-0.0182	0.143
api_only	-0.0810	0.0134	-6.04	0.000	***	-0.0123	0.114
multi	-0.1355	0.0246	-5.51	0.000	***	-0.0197	0.031
oth_only	-0.0312	0.0509	-0.61	0.539		-0.0049	0.006
days_dep	-0.0011	0.0001	-8.55	0.000	***	-0.0002	129.7
days_dep_sq	0.0000	0.0000	4.81	0.000	***	0.0000	29424.6
cat1	**-0.0839**	**0.0211**	**-3.97**	**0.000**	***	**-0.0127**	**0.054**
cat3a	**0.1122**	**0.0105**	**10.68**	**0.000**	***	**0.0185**	**0.267**
cat3b	**0.1328**	**0.0111**	**11.96**	**0.000**	***	**0.0218**	**0.333**
E2	-0.1440	0.0249	-5.78	0.000	***	-0.0209	0.028
E3	-0.1660	0.0295	-5.63	0.000	***	-0.0237	0.022
SG	-0.0218	0.0109	-2.00	0.045	**	-0.0035	0.396
fiveYO	-0.0488	0.0136	-3.59	0.000	***	-0.0076	0.156
AEF	-0.0217	0.0216	-1.00	0.316		-0.0034	0.048
ATF	-0.0786	0.0330	-2.39	0.017	**	-0.0119	0.017
NF	-0.1725	0.0239	-7.20	0.000	***	-0.0247	0.057
GTEP	-0.0669	0.0212	-3.16	0.002	***	-0.0102	0.040
TEP	-0.0394	0.0269	-1.47	0.143		-0.0061	0.022
twoYO	-0.1422	0.0963	-1.48	0.140		-0.0205	0.002
threeYO	0.0273	0.0939	0.29	0.772		0.0044	0.001
NCSA	-0.0146	0.0358	-0.41	0.683		-0.0023	0.013
NPSB	-0.2251	0.0667	-3.38	0.001	***	-0.0307	0.004
other_ep	-0.0603	0.0337	-1.79	0.074	*	-0.0092	0.014

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
FY2002	-0.1657	0.0114	-14.48	0.000 ***	-0.0247	0.206
FY2003	-0.1122	0.0124	-9.01	0.000 ***	-0.0170	0.190
FY2004	-0.1646	0.0127	-12.95	0.000 ***	-0.0244	0.186
FY2005	-0.0976	0.0127	-7.70	0.000 ***	-0.0149	0.178
Chicago	-0.0121	0.0264	-0.46	0.648	-0.0019	0.042
Dallas	0.1134	0.0254	4.47	0.000 ***	0.0193	0.048
Denver	-0.0247	0.0299	-0.82	0.410	-0.0039	0.028
Houston	0.0333	0.0260	1.28	0.201	0.0054	0.044
Jax	-0.0402	0.0282	-1.43	0.153	-0.0062	0.034
LA	-0.1504	0.0271	-5.55	0.000 ***	-0.0218	0.047
Miami	-0.0702	0.0271	-2.59	0.010 ***	-0.0107	0.042
Michigan	0.0986	0.0254	3.87	0.000 ***	0.0167	0.044
Minn	-0.0063	0.0284	-0.22	0.824	-0.0010	0.033
Nashville	0.1308	0.0263	4.97	0.000 ***	0.0226	0.037
New_England	-0.6693	0.0364	-18.38	0.000 ***	-0.0687	0.035
New_Orleans	0.1362	0.0270	5.05	0.000 ***	0.0236	0.033
New_York	-0.3365	0.0294	-11.46	0.000 ***	-0.0432	0.041
Ohio	0.0958	0.0248	3.87	0.000 ***	0.0162	0.050
Philly	0.0381	0.0272	1.40	0.162	0.0062	0.035
Phoenix	-0.0593	0.0292	-2.03	0.043 **	-0.0091	0.032
Pittsburgh	-0.1430	0.0291	-4.91	0.000 ***	-0.0208	0.034
Portland	-0.0703	0.0307	-2.29	0.022 **	-0.0107	0.027
Raleigh	0.0304	0.0256	1.19	0.235	0.0049	0.046
Richmond	-0.0468	0.0276	-1.69	0.090 *	-0.0072	0.037
San_Anton	0.0107	0.0291	0.37	0.713	0.0017	0.031
San_Diego	-0.1176	0.0271	-4.34	0.000 ***	-0.0174	0.047
San_Fran	-0.0344	0.0273	-1.26	0.207	-0.0054	0.042
Seattle	-0.1335	0.0303	-4.40	0.000 ***	-0.0195	0.030
St_Louis	0.0270	0.0262	1.03	0.303	0.0044	0.042
_cons	-1.1416	0.0254	-44.96	0.000 ***		

Probit regression. Dependent variable is "attrited at RTC"

* Indicates coefficient is significant at 10-percent level or better

** Indicates coefficient is significant at 5-percent level or better

*** Indicates coefficient is significant at 1-percent level or better

AFQT Category II is omitted category

Number of obs = 213,250   Pseudo R^2 = 0.0286

Source: Derived from PRIDE data files (CNRC, 2007).

Table 98. RTC Attrition Regression results, Education Tier Groups

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
enl_bonus	-0.0004	0.0085	-0.05	0.964	-0.0001	0.616
age_17	-0.0449	0.0124	-3.61	0.000***	-0.0070	0.204
age_19	0.0475	0.0118	4.04	0.000***	0.0077	0.173
age_20	0.0521	0.0138	3.78	0.000***	0.0085	0.107
age_21	0.0717	0.0160	4.47	0.000***	0.0118	0.071
age_22	0.0551	0.0190	2.90	0.004***	0.0090	0.048
age_23p	0.1271	0.0134	9.52	0.000***	0.0214	0.125
married_fem	0.4311	0.0581	7.41	0.000***	0.0894	0.003
single_fem	0.2457	0.0098	25.13	0.000***	0.0433	0.169
married_mal	0.0464	0.0340	1.36	0.173	0.0076	0.012
blk_only	-0.1089	0.0111	-9.78	0.000***	-0.0164	0.185
hsp_only	-0.1232	0.0129	-9.58	0.000***	-0.0184	0.143
api_only	-0.0802	0.0134	-5.97	0.000***	-0.0122	0.114
multi	-0.1370	0.0246	-5.57	0.000***	-0.0198	0.031
oth_only	-0.0307	0.0510	-0.60	0.547	-0.0047	0.006
days_dep	-0.0011	0.0001	-8.70	0.000***	-0.0002	129.7
days_dep_sq	0.0000	0.0000	5.21	0.000***	0.0000	29424.6
afqt	-0.0051	0.0003	-18.34	0.000***	-0.0008	60.061
tier2	**0.2852**	**0.0172**	**16.59**	**0.000*** **	**0.0535**	**0.043**
tier3	**0.3143**	**0.0218**	**14.44**	**0.000*** **	**0.0603**	**0.027**
E2	-0.1404	0.0250	-5.62	0.000***	-0.0203	0.028
E3	-0.1400	0.0295	-4.75	0.000***	-0.0202	0.022
SG	-0.0073	0.0109	-0.67	0.504	-0.0011	0.396
fiveYO	-0.0276	0.0136	-2.03	0.043**	-0.0043	0.156
AEF	0.0241	0.0220	1.09	0.275	0.0039	0.048
ATF	-0.0373	0.0332	-1.12	0.261	-0.0057	0.017
NF	-0.0959	0.0243	-3.95	0.000***	-0.0143	0.057
GTEP	-0.0546	0.0212	-2.57	0.010***	-0.0083	0.040
TEP	-0.0114	0.0269	-0.42	0.673	-0.0018	0.022
twoYO	-0.0900	0.0965	-0.93	0.351	-0.0134	0.002
threeYO	0.0306	0.0942	0.33	0.745	0.0049	0.001
NCSA	0.0201	0.0357	0.56	0.573	0.0032	0.013
NPSB	-0.2278	0.0670	-3.40	0.001***	-0.0308	0.004
other_ep	-0.0441	0.0338	-1.31	0.191	-0.0068	0.014
FY2002	-0.1612	0.0115	-14.04	0.000***	-0.0239	0.206
FY2003	-0.0952	0.0125	-7.61	0.000***	-0.0145	0.190
FY2004	-0.1416	0.0128	-11.07	0.000***	-0.0211	0.186
FY2005	-0.0682	0.0128	-5.34	0.000***	-0.0105	0.178
Chicago	-0.0068	0.0265	-0.26	0.796	-0.0011	0.042

Variable	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
Dallas	0.1205	0.0254	4.74	0.000***	0.0205	0.048
Denver	-0.0188	0.0300	-0.63	0.531	-0.0029	0.028
Houston	0.0424	0.0260	1.63	0.103	0.0069	0.044
Jax	-0.0408	0.0282	-1.45	0.148	-0.0063	0.034
LA	-0.1530	0.0272	-5.63	0.000***	-0.0220	0.047
Miami	-0.0670	0.0271	-2.47	0.013**	-0.0102	0.042
Michigan	0.1038	0.0255	4.07	0.000***	0.0175	0.044
Minn	-0.0002	0.0284	-0.01	0.994	0.0000	0.033
Nashville	0.1305	0.0264	4.95	0.000***	0.0224	0.037
New_England	-0.6700	0.0365	-18.34	0.000***	-0.0683	0.035
New_Orleans	0.1278	0.0270	4.73	0.000***	0.0219	0.033
New_York	-0.3340	0.0294	-11.36	0.000***	-0.0427	0.041
Ohio	0.1008	0.0248	4.06	0.000***	0.0169	0.050
Philly	0.0389	0.0273	1.43	0.153	0.0063	0.035
Phoenix	-0.0596	0.0293	-2.03	0.042**	-0.0091	0.032
Pittsburgh	-0.1421	0.0292	-4.87	0.000***	-0.0205	0.034
Portland	-0.0705	0.0307	-2.30	0.022**	-0.0107	0.027
Raleigh	0.0266	0.0257	1.04	0.300	0.0043	0.046
Richmond	-0.0497	0.0277	-1.80	0.072*	-0.0076	0.037
San_Anton	0.0123	0.0291	0.42	0.672	0.0020	0.031
San_Diego	-0.1141	0.0272	-4.20	0.000***	-0.0168	0.047
San_Fran	-0.0288	0.0273	-1.06	0.291	-0.0045	0.042
Seattle	-0.1277	0.0304	-4.20	0.000***	-0.0186	0.030
St_Louis	0.0327	0.0263	1.24	0.213	0.0053	0.042
_cons	-0.8535	0.0263	-32.44	0.000***		

Probit regression. Dependent variable is "attrited at RTC"

* Indicates coefficient is significant at 10-percent level or better

** Indicates coefficient is significant at 5-percent level or better

*** Indicates coefficient is significant at 1-percent level or better

Tier I is omitted category

Number of obs = 213,250   Pseudo R^2 = 0.0323

Source: Derived from PRIDE data files (CNRC, 2007).

Table 99. RTC Attrition Regression Results, Recruit Quality Matrix Cells

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
enl_bonus	-0.0030	0.0085	-0.36	0.721	-0.0005	0.616
age_17	-0.0444	0.0124	-3.57	0.000***	-0.0069	0.204
age_19	0.0457	0.0118	3.89	0.000***	0.0074	0.173
age_20	0.0464	0.0138	3.37	0.001***	0.0075	0.107
age_21	0.0632	0.0160	3.95	0.000***	0.0104	0.071
age_22	0.0419	0.0190	2.21	0.027**	0.0068	0.048
age_23p	0.1102	0.0133	8.30	0.000***	0.0185	0.125
married_fem	0.4387	0.0581	7.55	0.000***	0.0915	0.003
single_fem	0.2493	0.0098	25.46	0.000***	0.0441	0.169
married_mal	0.0530	0.0340	1.56	0.119	0.0087	0.012
blk_only	-0.0934	0.0111	-8.43	0.000***	-0.0142	0.185
hsp_only	-0.1149	0.0128	-8.95	0.000***	-0.0172	0.143
api_only	-0.0766	0.0134	-5.70	0.000***	-0.0117	0.114
multi	-0.1251	0.0246	-5.09	0.000***	-0.0183	0.031
oth_only	-0.0259	0.0509	-0.51	0.611	-0.0040	0.006
days_dep	-0.0012	0.0001	-8.96	0.000***	-0.0002	129.7
days_dep_sq	0.0000	0.0000	5.58	0.000***	0.0000	29424.6
B_Cell	**0.3234**	**0.0145**	**22.28**	**0.000*****	**0.0615**	**0.070**
Cu_Cell	**0.1278**	**0.0097**	**13.18**	**0.000*****	**0.0209**	**0.331**
E2	-0.1472	0.0250	-5.90	0.000***	-0.0212	0.028
E3	-0.1571	0.0295	-5.33	0.000***	-0.0224	0.022
SG	-0.0275	0.0109	-2.54	0.011**	-0.0043	0.396
fiveYO	-0.0512	0.0136	-3.77	0.000***	-0.0079	0.156
AEF	-0.0632	0.0210	-3.01	0.003***	-0.0096	0.048
ATF	-0.1065	0.0327	-3.25	0.001***	-0.0157	0.017
NF	-0.2256	0.0223	-10.13	0.000***	-0.0311	0.057
GTEP	-0.0635	0.0212	-3.00	0.003***	-0.0097	0.040
TEP	-0.0352	0.0269	-1.31	0.191	-0.0054	0.022
twoYO	-0.1057	0.0962	-1.10	0.272	-0.0156	0.002
threeYO	0.0297	0.0941	0.32	0.753	0.0048	0.001
NCSA	0.0112	0.0358	0.31	0.755	0.0018	0.013
NPSB	-0.2417	0.0669	-3.61	0.000***	-0.0324	0.004
other_ep	-0.0449	0.0338	-1.33	0.183	-0.0069	0.014
FY2002	-0.1626	0.0115	-14.18	0.000***	-0.0242	0.206
FY2003	-0.1030	0.0125	-8.25	0.000***	-0.0156	0.190
FY2004	-0.1554	0.0127	-12.20	0.000***	-0.0230	0.186
FY2005	-0.0823	0.0127	-6.47	0.000***	-0.0126	0.178
Chicago	-0.0089	0.0265	-0.34	0.735	-0.0014	0.042
Dallas	0.1199	0.0254	4.72	0.000***	0.0204	0.048

Variable	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
Denver	-0.0240	0.0300	-0.80	0.424	-0.0037	0.028
Houston	0.0424	0.0260	1.63	0.103	0.0069	0.044
Jax	-0.0420	0.0282	-1.49	0.136	-0.0065	0.034
LA	-0.1483	0.0271	-5.47	0.000***	-0.0214	0.047
Miami	-0.0634	0.0271	-2.34	0.019**	-0.0097	0.042
Michigan	0.1045	0.0255	4.10	0.000***	0.0177	0.044
Minn	-0.0053	0.0284	-0.19	0.853	-0.0008	0.033
Nashville	0.1322	0.0263	5.02	0.000***	0.0227	0.037
New_England	-0.6723	0.0365	-18.43	0.000***	-0.0686	0.035
New_Orleans	0.1360	0.0270	5.03	0.000***	0.0235	0.033
New_York	-0.3345	0.0294	-11.38	0.000***	-0.0428	0.041
Ohio	0.1018	0.0248	4.10	0.000***	0.0172	0.050
Philly	0.0380	0.0272	1.40	0.163	0.0062	0.035
Phoenix	-0.0594	0.0293	-2.03	0.043**	-0.0091	0.032
Pittsburgh	-0.1454	0.0292	-4.98	0.000***	-0.0210	0.034
Portland	-0.0735	0.0307	-2.39	0.017**	-0.0111	0.027
Raleigh	0.0285	0.0256	1.11	0.266	0.0046	0.046
Richmond	-0.0497	0.0276	-1.80	0.072*	-0.0076	0.037
San_Anton	0.0103	0.0291	0.36	0.722	0.0017	0.031
San_Diego	-0.1133	0.0271	-4.17	0.000***	-0.0167	0.047
San_Fran	-0.0276	0.0273	-1.01	0.313	-0.0043	0.042
Seattle	-0.1345	0.0304	-4.43	0.000***	-0.0195	0.030
St_Louis	0.0312	0.0263	1.19	0.234	0.0050	0.042
_cons	-1.1701	0.0250	-46.88	0.000***		

Probit regression. Dependent variable is "attrited at RTC"

* Indicates coefficient is significant at 10-percent level or better

** Indicates coefficient is significant at 5-percent level or better

*** Indicates coefficient is significant at 1-percent level or better

A-Cell is omitted category

Number of obs = 213,250   Pseudo R^2 = 0.0311

Source: Derived from PRIDE data files (CNRC, 2007).

Table 100. RTC Attrition Regression Results, Recruit Education Credentials and Enlistment Programs

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
enl_bonus	0.0022	0.0086	0.25	0.801	0.0003	0.616
age_17	-0.0449	0.0125	-3.60	0.000***	-0.0070	0.204
age_19	0.0449	0.0118	3.81	0.000***	0.0072	0.173
age_20	0.0472	0.0138	3.41	0.001***	0.0076	0.107
age_21	0.0665	0.0161	4.13	0.000***	0.0109	0.071
age_22	0.0541	0.0191	2.83	0.005***	0.0088	0.048
age_23p	0.1386	0.0138	10.04	0.000***	0.0234	0.125
married_fem	0.4309	0.0582	7.40	0.000***	0.0891	0.003
single_fem	0.2528	0.0098	25.80	0.000***	0.0446	0.169
married_mal	0.0461	0.0341	1.35	0.177	0.0075	0.012
blk_only	-0.1057	0.0111	-9.49	0.000***	-0.0159	0.185
hsp_only	-0.1226	0.0129	-9.52	0.000***	-0.0182	0.143
api_only	-0.0774	0.0135	-5.75	0.000***	-0.0117	0.114
multi	-0.1382	0.0246	-5.62	0.000***	-0.0199	0.031
oth_only	-0.0242	0.0510	-0.48	0.635	-0.0038	0.006
days_dep	-0.0011	0.0001	-8.67	0.000***	-0.0002	129.7
days_dep_sq	0.0000	0.0000	5.41	0.000***	0.0000	29424.6
afqt	-0.0049	0.0003	-17.37	0.000***	-0.0008	60.061
mast_deg_I	**-0.3218**	**0.2130**	**-1.51**	**0.131**	**-0.0405**	**0.001**
bach_deg_I	**-0.1892**	**0.0362**	**-5.23**	0.000***	**-0.0263**	**0.017**
assoc_deg_I	**-0.0946**	**0.0435**	**-2.17**	0.030**	**-0.0140**	**0.009**
adult_hs_I	**0.2180**	**0.0225**	**9.67**	0.000***	**0.0394**	**0.026**
sem_college_I	**0.1649**	**0.0189**	**8.71**	0.000***	**0.0288**	**0.037**
fail_exit_I	**0.0552**	**0.0973**	**0.57**	**0.570**	**0.0090**	**0.001**
home_school_I	**0.2534**	**0.0520**	**4.87**	0.000***	**0.0471**	**0.004**
GED_II	**0.3151**	**0.0183**	**17.26**	0.000***	**0.0601**	**0.038**
cert_attnd_II	**0.0570**	**0.2345**	**0.24**	**0.808**	**0.0093**	**0.000**
other_non_trad_II	**0.0156**	**0.2368**	**0.07**	**0.947**	**0.0025**	**0.000**
corr_school_II	**0.2273**	**0.1144**	**1.99**	0.047**	**0.0416**	**0.001**
ngycp_II	**0.1755**	**0.0452**	**3.88**	0.000***	**0.0311**	**0.006**
no_cred_III	**0.3584**	**0.0218**	**16.40**	0.000***	**0.0703**	**0.027**
E2	-0.1437	0.0250	-5.74	0.000***	-0.0206	0.028
E3	-0.1019	0.0300	-3.40	0.001***	-0.0150	0.022
SG	**-0.0086**	**0.0109**	**-0.79**	**0.427**	**-0.0014**	**0.396**
fiveYO	**-0.0262**	**0.0136**	**-1.92**	0.054*	**-0.0041**	**0.156**
AEF	**0.0246**	**0.0221**	**1.12**	**0.264**	**0.0039**	**0.048**
ATF	**-0.0300**	**0.0332**	**-0.90**	**0.366**	**-0.0046**	**0.017**
NF	**-0.0882**	**0.0243**	**-3.63**	0.000***	**-0.0132**	**0.057**
GTEP	**-0.0527**	**0.0212**	**-2.49**	0.013**	**-0.0080**	**0.040**

Variable	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean
TEP	**-0.0110**	**0.0270**	**-0.41**	**0.683**	**-0.0017**	**0.022**
twoYO	**-0.0863**	**0.0966**	**-0.89**	**0.371**	**-0.0128**	**0.002**
threeYO	**0.0295**	**0.0944**	**0.31**	**0.755**	**0.0047**	**0.001**
NCSA	**0.0209**	**0.0357**	**0.58**	**0.559**	**0.0033**	**0.013**
NPSB	**-0.2222**	**0.0671**	**-3.31**	**0.001*** **	**-0.0300**	**0.004**
other_ep	**-0.0403**	**0.0338**	**-1.19**	**0.233**	**-0.0062**	**0.014**
FY2002	-0.1585	0.0115	-13.79	0.000***	-0.0235	0.206
FY2003	-0.0884	0.0125	-7.05	0.000***	-0.0134	0.190
FY2004	-0.1299	0.0128	-10.12	0.000***	-0.0194	0.186
FY2005	-0.0543	0.0128	-4.23	0.000***	-0.0084	0.178
Chicago	-0.0045	0.0266	-0.17	0.864	-0.0007	0.042
Dallas	0.1195	0.0254	4.70	0.000***	0.0203	0.048
Denver	-0.0304	0.0301	-1.01	0.311	-0.0047	0.028
Houston	0.0447	0.0261	1.72	0.086*	0.0073	0.044
Jax	-0.0486	0.0283	-1.72	0.086*	-0.0074	0.034
LA	-0.1580	0.0272	-5.80	0.000***	-0.0226	0.047
Miami	-0.0688	0.0272	-2.53	0.011**	-0.0104	0.042
Michigan	0.1003	0.0255	3.93	0.000***	0.0168	0.044
Minn	0.0016	0.0285	0.06	0.955	0.0003	0.033
Nashville	0.1275	0.0264	4.83	0.000***	0.0218	0.037
New_England	-0.6714	0.0366	-18.35	0.000***	-0.0681	0.035
New_Orleans	0.1245	0.0271	4.59	0.000***	0.0212	0.033
New_York	-0.3287	0.0294	-11.17	0.000***	-0.0420	0.041
Ohio	0.0983	0.0249	3.96	0.000***	0.0165	0.050
Philly	0.0439	0.0273	1.61	0.108	0.0071	0.035
Phoenix	-0.0721	0.0294	-2.46	0.014**	-0.0109	0.032
Pittsburgh	-0.1368	0.0292	-4.68	0.000***	-0.0197	0.034
Portland	-0.0881	0.0308	-2.86	0.004***	-0.0131	0.027
Raleigh	0.0221	0.0257	0.86	0.390	0.0035	0.046
Richmond	-0.0460	0.0277	-1.66	0.097*	-0.0070	0.037
San_Anton	0.0086	0.0291	0.30	0.767	0.0014	0.031
San_Diego	-0.1199	0.0272	-4.40	0.000***	-0.0175	0.047
San_Fran	-0.0343	0.0274	-1.25	0.211	-0.0053	0.042
Seattle	-0.1386	0.0305	-4.55	0.000***	-0.0200	0.030
St_Louis	0.0347	0.0263	1.32	0.188	0.0056	0.042
_cons	-0.8918	0.0265	-33.63	0.000***		

Probit regression. Dependent variable is "attrited at RTC"
* Indicates coefficient is significant at 10-percent level or better
** Indicates coefficient is significant at 5-percent level or better
*** Indicates coefficient is significant at 1-percent level or better
Traditional high school graduate and GENDET are omitted categories
Number of obs = 213,250 Pseudo R^2 = 0.0342
Source: Derived from PRIDE data files (CNRC, 2007).

Table 101. RTC Attrition Regression Results, Women and Traditional Jobs

Variable	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
enl_bonus	0.0089	0.0185	0.48	0.629		0.0018	0.632
age_17	-0.0425	0.0251	-1.69	0.091	*	-0.0083	0.251
age_19	0.0194	0.0264	0.74	0.461		0.0039	0.161
age_20	0.0306	0.0315	0.97	0.331		0.0062	0.096
age_21	0.0092	0.0379	0.24	0.808		0.0018	0.062
age_22	-0.0003	0.0456	-0.01	0.995		-0.0001	0.042
age_23p	0.0689	0.0327	2.10	0.035	**	0.0141	0.109
married	0.2016	0.0568	3.55	0.000	***	0.0447	0.020
blk_only	-0.1692	0.0237	-7.13	0.000	***	-0.0319	0.230
hsp_only	-0.2243	0.0287	-7.82	0.000	***	-0.0406	0.151
api_only	-0.1057	0.0292	-3.62	0.000	***	-0.0200	0.118
multi	-0.2149	0.0509	-4.22	0.000	***	-0.0378	0.036
oth_only	-0.1470	0.1230	-1.20	0.232		-0.0268	0.005
days_dep	-0.0016	0.0003	-5.64	0.000	***	-0.0003	135.2
days_dep_sq	0.0000	0.0000	4.27	0.000	***	0.0000	32696.5
afqt	-0.0043	0.0005	-7.82	0.000	***	-0.0009	58.247
mast_deg_I	-0.0204	0.3206	-0.06	0.949		-0.0040	0.001
bach_deg_I	-0.2655	0.0763	-3.48	0.000	***	-0.0451	0.020
assoc_deg_I	-0.1835	0.0938	-1.96	0.050	**	-0.0327	0.011
adult_hs_I	0.2328	0.0562	4.14	0.000	***	0.0525	0.020
sem_college_I	0.1589	0.0467	3.40	0.001	***	0.0344	0.031
fail_exit_I	-0.2472	0.2444	-1.01	0.312		-0.0422	0.002
home_school_I	0.3180	0.1217	2.61	0.009	***	0.0752	0.004
GED_II	0.4124	0.0609	6.77	0.000	***	0.1017	0.015
other_non_trad_II	-0.2391	0.5610	-0.43	0.670		-0.0411	0.000
corr_school_II	0.1443	0.3002	0.48	0.631		0.0312	0.001
ngycp_II	0.1184	0.1448	0.82	0.414		0.0252	0.003
no_cred_III	0.4256	0.0808	5.27	0.000	***	0.1059	0.009
E2	-0.1027	0.0499	-2.06	0.040	**	-0.0193	0.032
E3	-0.1098	0.0631	-1.74	0.082	*	-0.0205	0.022
FY2002	-0.1776	0.0261	-6.80	0.000	***	-0.0332	0.207
FY2003	-0.0177	0.0266	-0.66	0.507		-0.0035	0.191
FY2004	-0.0558	0.0271	-2.06	0.039	**	-0.0109	0.179
FY2005	0.0651	0.0271	2.40	0.016	**	0.0133	0.168
Chicago	-0.0025	0.0593	-0.04	0.967		-0.0005	0.041
Dallas	0.1147	0.0588	1.95	0.051	*	0.0242	0.041
Denver	-0.0599	0.0671	-0.89	0.372		-0.0115	0.028
Houston	0.1209	0.0590	2.05	0.041	**	0.0256	0.039

Variable	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
Jax	0.0363	0.0618	0.59	0.557		0.0074	0.034
LA	-0.1381	0.0589	-2.34	0.019	**	-0.0255	0.053
Miami	0.1082	0.0588	1.84	0.066	*	0.0228	0.041
Michigan	0.1391	0.0571	2.44	0.015	**	0.0298	0.043
Minn	-0.0340	0.0635	-0.54	0.593		-0.0066	0.033
Nashville	0.1674	0.0596	2.81	0.005	***	0.0364	0.035
New_England	-0.7133	0.0817	-8.73	0.000	***	-0.0930	0.034
New_Orleans	0.2277	0.0596	3.82	0.000	***	0.0510	0.033
New_York	-0.4539	0.0687	-6.61	0.000	***	-0.0697	0.043
Ohio	0.1294	0.0558	2.32	0.020	**	0.0275	0.048
Philly	0.0579	0.0602	0.96	0.336		0.0119	0.037
Phoenix	-0.0953	0.0644	-1.48	0.139		-0.0180	0.035
Pittsburgh	-0.1156	0.0642	-1.80	0.072	*	-0.0215	0.034
Portland	-0.0451	0.0674	-0.67	0.504		-0.0087	0.028
Raleigh	0.0403	0.0571	0.70	0.481		0.0082	0.046
Richmond	0.0254	0.0601	0.42	0.673		0.0051	0.038
San_Anton	0.1761	0.0629	2.80	0.005	***	0.0385	0.032
San_Diego	-0.0999	0.0592	-1.69	0.091	*	-0.0188	0.052
San_Fran	-0.0491	0.0608	-0.81	0.420		-0.0095	0.043
Seattle	-0.1716	0.0674	-2.54	0.011	**	-0.0309	0.031
St_Louis	0.0914	0.0595	1.54	0.124		0.0191	0.038
trad_fem	**-0.0247**	**0.0192**	**-1.29**	**0.198**		**-0.0049**	**0.344**
_cons	-0.6905	0.0586	-11.78	0.000	***		

Probit regression. Dependent variable is "attrited at RTC"

* Indicates coefficient is significant at 10-percent level or better

** Indicates coefficient is significant at 5-percent level or better

*** Indicates coefficient is significant at 1-percent level or better

Nontraditional female jobs is omitted category

Number of obs = 36,584   Pseudo R^2 = 0.0323

Source: Derived from PRIDE data files (CNRC, 2007).

Table 102. RTC Attrition Regression Results, Women and All Traditional Ratings

Variable	**Coeff.**	**Std. Err.**	**z**	**P>|z|**	**Partial Effects**	**Mean**
enl_bonus	0.0087	0.0187	0.47	0.641	0.0017	0.632
age_17	-0.0412	0.0251	-1.64	0.101	-0.0081	0.251
age_19	0.0176	0.0264	0.67	0.504	0.0035	0.161
age_20	0.0298	0.0315	0.95	0.344	0.0060	0.096
age_21	0.0081	0.0379	0.21	0.830	0.0016	0.062
age_22	-0.0004	0.0456	-0.01	0.994	-0.0001	0.041
age_23p	0.0676	0.0328	2.06	0.039**	0.0139	0.108
married	0.2023	0.0569	3.55	0.000***	0.0449	0.020
blk_only	-0.1721	0.0238	-7.23	0.000***	-0.0324	0.230
hsp_only	-0.2257	0.0287	-7.85	0.000***	-0.0408	0.151
api_only	-0.1064	0.0293	-3.64	0.000***	-0.0201	0.118
multi	-0.2188	0.0510	-4.29	0.000***	-0.0384	0.036
oth_only	-0.1463	0.1231	-1.19	0.235	-0.0266	0.005
days_dep	-0.0016	0.0003	-5.78	0.000***	-0.0003	135.3
days_dep_sq	0.0000	0.0000	4.45	0.000***	0.0000	32726.3
afqt	-0.0041	0.0006	-7.19	0.000***	-0.0008	58.210
mast_deg_I	0.1434	0.3445	0.42	0.677	0.0310	0.001
bach_deg_I	-0.2482	0.0771	-3.22	0.001***	-0.0426	0.019
assoc_deg_I	-0.1880	0.0938	-2.01	0.045**	-0.0334	0.011
adult_hs_I	0.2278	0.0562	4.05	0.000***	0.0512	0.020
sem_college_I	0.1548	0.0468	3.31	0.001***	0.0334	0.031
fail_exit_I	-0.2431	0.2443	-0.99	0.320	-0.0416	0.002
home_school_I	0.3130	0.1218	2.57	0.010***	0.0738	0.004
GED_II	0.4038	0.0610	6.62	0.000***	0.0992	0.015
other_non_trad_II	-0.2712	0.5589	-0.49	0.627	-0.0456	0.000
corr_school_II	0.1403	0.3005	0.47	0.641	0.0302	0.001
ngycp_II	0.1093	0.1449	0.75	0.451	0.0231	0.003
no_cred_III	0.4147	0.0811	5.11	0.000***	0.1026	0.009
E2	-0.1035	0.0500	-2.07	0.039**	-0.0194	0.032
E3	-0.1035	0.0634	-1.63	0.103	-0.0194	0.022
FY2002	-0.1749	0.0262	-6.67	0.000***	-0.0327	0.207
FY2003	-0.0157	0.0266	-0.59	0.554	-0.0031	0.190
FY2004	-0.0516	0.0271	-1.90	0.057*	-0.0101	0.179
FY2005	0.0635	0.0271	2.34	0.019**	0.0129	0.168
Chicago	-0.0026	0.0594	-0.04	0.965	-0.0005	0.041
Dallas	0.1130	0.0589	1.92	0.055*	0.0239	0.041
Denver	-0.0563	0.0671	-0.84	0.402	-0.0108	0.028
Houston	0.1198	0.0591	2.03	0.043**	0.0254	0.039

Variable	Coeff.	Std. Err.	z	P>|z|		Partial Effects	Mean
Jax	0.0395	0.0619	0.64	0.524		0.0080	0.034
LA	-0.1377	0.0590	-2.33	0.020	**	-0.0254	0.053
Miami	0.1050	0.0588	1.79	0.074	*	0.0221	0.041
Michigan	0.1398	0.0572	2.44	0.015	**	0.0299	0.043
Minn	-0.0371	0.0636	-0.58	0.560		-0.0072	0.033
Nashville	0.1651	0.0597	2.77	0.006	***	0.0358	0.035
New_England	-0.7123	0.0818	-8.71	0.000	***	-0.0929	0.034
New_Orleans	0.2294	0.0596	3.85	0.000	***	0.0514	0.033
New_York	-0.4631	0.0688	-6.73	0.000	***	-0.0707	0.043
Ohio	0.1264	0.0559	2.26	0.024	**	0.0268	0.048
Philly	0.0557	0.0603	0.92	0.355		0.0114	0.037
Phoenix	-0.0946	0.0645	-1.47	0.143		-0.0178	0.035
Pittsburgh	-0.1163	0.0643	-1.81	0.071	*	-0.0217	0.034
Portland	-0.0436	0.0675	-0.65	0.519		-0.0084	0.028
Raleigh	0.0405	0.0572	0.71	0.479		0.0082	0.046
Richmond	0.0316	0.0603	0.52	0.600		0.0064	0.037
San_Anton	0.1756	0.0630	2.79	0.005	***	0.0383	0.032
San_Diego	-0.0998	0.0592	-1.68	0.092	*	-0.0188	0.052
San_Fran	-0.0486	0.0610	-0.80	0.425		-0.0094	0.043
Seattle	-0.1689	0.0676	-2.50	0.012	**	-0.0305	0.031
St_Louis	0.0915	0.0596	1.54	0.125		0.0191	0.038
AC	**-0.0783**	**0.0779**	**-1.01**	**0.315**		**-0.0149**	**0.013**
AG	**0.0250**	**0.1487**	**0.17**	**0.867**		**0.0050**	**0.003**
AZ	**0.0321**	**0.0971**	**0.33**	**0.741**		**0.0065**	**0.007**
CS	**0.0108**	**0.0449**	**0.24**	**0.810**		**0.0022**	**0.038**
CTI	**-0.1868**	**0.0738**	**-2.53**	**0.011**	**	**-0.0333**	**0.019**
CTR	**0.1302**	**0.1095**	**1.19**	**0.234**		**0.0279**	**0.006**
HM	**-0.0577**	**0.0275**	**-2.09**	**0.036**	**	**-0.0112**	**0.133**
IS	**0.1343**	**0.0829**	**1.62**	**0.105**		**0.0288**	**0.010**
IT	**-0.0665**	**0.0527**	**-1.26**	**0.207**		**-0.0127**	**0.031**
MC	**-0.0480**	**0.1003**	**-0.48**	**0.632**		**-0.0093**	**0.008**
OS	**-0.1561**	**0.0624**	**-2.50**	**0.012**	**	**-0.0284**	**0.023**
PC	**-0.0763**	**0.2410**	**-0.32**	**0.752**		**-0.0145**	**0.001**
PS	**-0.0864**	**0.0699**	**-1.24**	**0.216**		**-0.0163**	**0.017**
RP	**0.0718**	**0.2096**	**0.34**	**0.732**		**0.0149**	**0.001**
SH	**0.0515**	**0.0798**	**0.65**	**0.519**		**0.0105**	**0.011**
SK	**0.1366**	**0.0535**	**2.55**	**0.011**	**	**0.0293**	**0.025**
YN	**-0.0304**	**0.0612**	**-0.50**	**0.619**		**-0.0059**	**0.021**
_cons	-0.6954	0.0593	-11.72	0.000	***		

Probit regression. Dependent variable is "attrited at RTC"

* Indicates coefficient is significant at 10-percent level or better

** Indicates coefficient is significant at 5-percent level or better

Variable	Coeff.	Std. Err.	z	P>|z|	Partial Effects	Mean

*** Indicates coefficient is significant at 1-percent level or better

Nontraditional female jobs is omitted category

Number of obs = 36,521   Pseudo R^2 = 0.0334

Source: Derived from PRIDE data files (CNRC, 2007).

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APPENDIX G – RTC ATTRITION PROBABILITY TABLES

Table 103. Probabilities (Percent) for RTC Attrition of Master's Degree Recruits by Age and AFQT Percentile Score

	Probability of Attrition (Percent)							
AFQT Score	Age 17	Age 18	Age 19	Age 20	Age 21	Age 25	Age 29	Age 33
31	5.1	5.5	5.8	6.2	6.5	8.0	9.7	11.5
35	4.9	5.3	5.6	5.9	6.3	7.8	9.4	11.1
40	4.7	5.0	5.3	5.6	6.0	7.4	9.0	10.7
45	4.4	4.7	5.0	5.4	5.7	7.1	8.6	10.2
50	4.2	4.5	4.8	5.1	5.4	6.8	8.2	9.8
55	4.0	4.3	4.5	4.8	5.2	6.5	7.9	9.4
60	3.8	4.0	4.3	4.6	4.9	6.2	7.5	9.0
65	3.5	3.8	4.1	4.4	4.6	5.9	7.2	8.7
70	3.3	3.6	3.9	4.1	4.4	5.6	6.9	8.3
75	3.2	3.4	3.7	3.9	4.2	5.3	6.6	8.0
80	3.0	3.2	3.5	3.7	4.0	5.1	6.3	7.6
85	2.8	3.0	3.3	3.5	3.8	4.8	6.0	7.3
90	2.6	2.9	3.1	3.3	3.6	4.6	5.7	7.0
95	2.5	2.7	2.9	3.1	3.4	4.4	5.4	6.6
99	2.4	2.6	2.8	3.0	3.2	4.2	5.2	6.4

Source: Derived from PRIDE data files (CNRC, 2007).

Table 104. Probabilities (Percent) for RTC Attrition of Bachelor's Degree Recruits by Age and AFQT Percentile Score

	Probability of Attrition (Percent)							
AFQT Score	Age 17	Age 18	Age 19	Age 20	Age 21	Age 25	Age 29	Age 33
31	6.7	7.0	7.4	7.7	8.1	9.6	11.2	13.0
35	6.4	6.8	7.1	7.4	7.8	9.3	10.9	12.6
40	6.1	6.4	6.8	7.1	7.4	8.9	10.4	12.1
45	5.8	6.1	6.4	6.7	7.1	8.5	10.0	11.6
50	5.5	5.8	6.1	6.4	6.7	8.1	9.6	11.2
55	5.2	5.5	5.8	6.1	6.4	7.7	9.1	10.7
60	5.0	5.2	5.5	5.8	6.1	7.4	8.7	10.3
65	4.7	5.0	5.2	5.5	5.8	7.0	8.4	9.8
70	4.5	4.7	5.0	5.2	5.5	6.7	8.0	9.4
75	4.2	4.5	4.7	5.0	5.2	6.4	7.6	9.0
80	4.0	4.2	4.5	4.7	5.0	6.1	7.3	8.6
85	3.8	4.0	4.2	4.5	4.7	5.8	7.0	8.2
90	3.6	3.8	4.0	4.2	4.5	5.5	6.6	7.9
95	3.4	3.6	3.8	4.0	4.2	5.2	6.3	7.5
99	3.2	3.4	3.6	3.8	4.1	5.0	6.1	7.3

Source: Derived from PRIDE data files (CNRC, 2007).

Table 105. Probabilities (Percent) for RTC Attrition of Associate’s Degree Recruits by Age and AFQT Percentile Score

	Probability of Attrition (Percent)							
AFQT Score	Age 17	Age 18	Age 19	Age 20	Age 21	Age 25	Age 29	Age 33
31	8.1	8.5	8.8	9.2	9.5	11.0	12.7	14.4
35	7.8	8.1	8.5	8.8	9.2	10.7	12.3	14.0
40	7.5	7.8	8.1	8.4	8.8	10.2	11.8	13.4
45	7.1	7.4	7.7	8.0	8.4	9.8	11.3	12.9
50	6.8	7.0	7.3	7.7	8.0	9.3	10.8	12.4
55	6.4	6.7	7.0	7.3	7.6	8.9	10.3	11.9
60	6.1	6.4	6.7	7.0	7.2	8.5	9.9	11.4
65	5.8	6.1	6.3	6.6	6.9	8.1	9.5	10.9
70	5.5	5.8	6.0	6.3	6.6	7.7	9.0	10.5
75	5.2	5.5	5.7	6.0	6.2	7.4	8.6	10.0
80	5.0	5.2	5.4	5.7	5.9	7.0	8.3	9.6
85	4.7	4.9	5.2	5.4	5.6	6.7	7.9	9.2
90	4.4	4.7	4.9	5.1	5.4	6.4	7.5	8.8
95	4.2	4.4	4.6	4.9	5.1	6.1	7.2	8.4
99	4.0	4.2	4.4	4.7	4.9	5.8	6.9	8.1

Source: Derived from PRIDE data files (CNRC, 2007).

Table 106. Probabilities (Percent) for RTC Attrition of Traditional High School Graduate Recruits by Age and AFQT Percentile Score

	Probability of Attrition (Percent)							
AFQT Score	Age 17	Age 18	Age 19	Age 20	Age 21	Age 25	Age 29	Age 33
31	10.5	10.8	11.1	11.5	11.8	13.4	15.0	16.8
35	10.1	10.4	10.8	11.1	11.4	12.9	14.5	16.3
40	9.6	10.0	10.3	10.6	11.0	12.4	13.9	15.6
45	9.2	9.5	9.8	10.1	10.5	11.9	13.4	15.0
50	8.8	9.1	9.4	9.7	10.0	11.4	12.8	14.4
55	8.4	8.7	9.0	9.3	9.6	10.9	12.3	13.8
60	8.0	8.3	8.6	8.8	9.1	10.4	11.8	13.3
65	7.6	7.9	8.2	8.4	8.7	9.9	11.3	12.7
70	7.3	7.5	7.8	8.0	8.3	9.5	10.8	12.2
75	6.9	7.2	7.4	7.7	7.9	9.1	10.3	11.7
80	6.6	6.8	7.1	7.3	7.6	8.7	9.9	11.2
85	6.2	6.5	6.7	6.9	7.2	8.3	9.4	10.7
90	5.9	6.2	6.4	6.6	6.9	7.9	9.0	10.2
95	5.6	5.8	6.1	6.3	6.5	7.5	8.6	9.8
99	5.4	5.6	5.8	6.0	6.3	7.2	8.3	9.4

Source: Derived from PRIDE data files (CNRC, 2007).

Table 107. Probabilities (Percent) for RTC Attrition of Adult Education Diploma Recruits by Age and AFQT Percentile Score

	Probability of Attrition (Percent)							
AFQT Score	Age 17	Age 18	Age 19	Age 20	Age 21	Age 25	Age 29	Age 33
31	14.4	14.8	15.1	15.5	15.8	17.3	19.0	20.7
35	14.0	14.3	14.6	15.0	15.3	16.8	18.4	20.1
40	13.4	13.7	14.0	14.4	14.7	16.1	17.7	19.4
45	12.8	13.2	13.5	13.8	14.1	15.5	17.0	18.7
50	12.3	12.6	12.9	13.2	13.5	14.9	16.4	18.0
55	11.8	12.1	12.4	12.7	13.0	14.3	15.7	17.3
60	11.3	11.6	11.9	12.1	12.4	13.7	15.1	16.6
65	10.8	11.1	11.3	11.6	11.9	13.1	14.5	15.9
70	10.3	10.6	10.9	11.1	11.4	12.6	13.9	15.3
75	9.9	10.1	10.4	10.6	10.9	12.0	13.3	14.7
80	9.4	9.7	9.9	10.2	10.4	11.5	12.7	14.1
85	9.0	9.2	9.5	9.7	10.0	11.0	12.2	13.5
90	8.6	8.8	9.0	9.3	9.5	10.5	11.7	12.9
95	8.2	8.4	8.6	8.9	9.1	10.1	11.2	12.4
99	7.9	8.1	8.3	8.5	8.7	9.7	10.8	11.9

Source: Derived from PRIDE data files (CNRC, 2007).

Table 108. Probabilities (Percent) for RTC Attrition of Recruits with a GED and One Semester of College or Job Corps Certificate by Age and AFQT Percentile Score

	Probability of Attrition (Percent)							
AFQT Score	Age 17	Age 18	Age 19	Age 20	Age 21	Age 25	Age 29	Age 33
31	14.0	14.4	14.7	15.1	15.4	16.9	18.6	20.3
35	13.6	13.9	14.2	14.6	14.9	16.4	18.0	19.7
40	13.0	13.3	13.7	14.0	14.3	15.8	17.3	19.0
45	12.5	12.8	13.1	13.4	13.8	15.1	16.7	18.3
50	12.0	12.3	12.6	12.9	13.2	14.5	16.0	17.6
55	11.5	11.7	12.0	12.3	12.6	13.9	15.4	16.9
60	11.0	11.2	11.5	11.8	12.1	13.4	14.7	16.3
65	10.5	10.8	11.0	11.3	11.6	12.8	14.1	15.6
70	10.0	10.3	10.5	10.8	11.1	12.3	13.6	15.0
75	9.6	9.8	10.1	10.3	10.6	11.7	13.0	14.4
80	9.1	9.4	9.6	9.9	10.1	11.2	12.4	13.8
85	8.7	9.0	9.2	9.4	9.7	10.7	11.9	13.2
90	8.3	8.5	8.8	9.0	9.2	10.3	11.4	12.6
95	7.9	8.2	8.4	8.6	8.8	9.8	10.9	12.1
99	7.6	7.8	8.1	8.3	8.5	9.4	10.5	11.7

Source: Derived from PRIDE data files (CNRC, 2007).

Table 109. Probabilities (Percent) for RTC Attrition of Home Schooled Recruits by Age and AFQT Percentile Score

	Probability of Attrition (Percent)							
AFQT Score	Age 17	Age 18	Age 19	Age 20	Age 21	Age 25	Age 29	Age 33
31	18.2	18.5	18.9	19.2	19.6	21.1	22.7	24.5
35	17.6	18.0	18.3	18.6	19.0	20.5	22.1	23.8
40	17.0	17.3	17.6	18.0	18.3	19.7	21.3	23.0
45	16.3	16.6	17.0	17.3	17.6	19.0	20.5	22.2
50	15.7	16.0	16.3	16.6	16.9	18.3	19.8	21.3
55	15.1	15.4	15.7	16.0	16.3	17.6	19.0	20.6
60	14.5	14.8	15.1	15.4	15.6	16.9	18.3	19.8
65	13.9	14.2	14.5	14.7	15.0	16.2	17.6	19.0
70	13.4	13.6	13.9	14.1	14.4	15.6	16.9	18.3
75	12.8	13.1	13.3	13.6	13.8	15.0	16.2	17.6
80	12.3	12.5	12.8	13.0	13.3	14.4	15.6	16.9
85	11.8	12.0	12.2	12.5	12.7	13.8	14.9	16.2
90	11.3	11.5	11.7	11.9	12.2	13.2	14.3	15.6
95	10.8	11.0	11.2	11.4	11.7	12.6	13.7	14.9
99	10.4	10.6	10.8	11.0	11.3	12.2	13.3	14.4

Source: Derived from PRIDE data files (CNRC, 2007).

Table 110. Probabilities (Percent) for RTC Attrition of GED Recruits by Age and AFQT Percentile Score

	Probability of Attrition (Percent)							
AFQT Score	Age 17	Age 18	Age 19	Age 20	Age 21	Age 25	Age 29	Age 33
31	17.5	17.9	18.2	18.5	18.9	20.4	22.1	23.8
35	17.0	17.3	17.7	18.0	18.3	19.8	21.4	23.2
40	16.3	16.7	17.0	17.3	17.7	19.1	20.6	22.3
45	15.7	16.0	16.3	16.7	17.0	18.4	19.9	21.5
50	15.1	15.4	15.7	16.0	16.3	17.7	19.1	20.7
55	14.5	14.8	15.1	15.4	15.7	17.0	18.4	20.0
60	13.9	14.2	14.5	14.8	15.1	16.3	17.7	19.2
65	13.4	13.6	13.9	14.2	14.5	15.7	17.0	18.5
70	12.8	13.1	13.3	13.6	13.9	15.1	16.4	17.8
75	12.3	12.5	12.8	13.0	13.3	14.4	15.7	17.1
80	11.8	12.0	12.2	12.5	12.8	13.9	15.1	16.4
85	11.3	11.5	11.7	12.0	12.2	13.3	14.4	15.7
90	10.8	11.0	11.2	11.5	11.7	12.7	13.8	15.1
95	10.3	10.5	10.7	11.0	11.2	12.2	13.3	14.5
99	9.9	10.1	10.4	10.6	10.8	11.7	12.8	14.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 111. Probabilities (Percent) for RTC Attrition of Correspondence School, Distance Learning, Home Study, or Independent Study Recruits by Age and AFQT Percentile Score

	Probability of Attrition (Percent)							
AFQT Score	Age 17	Age 18	Age 19	Age 20	Age 21	Age 25	Age 29	Age 33
31	15.1	15.4	15.7	16.1	16.5	18.0	19.6	21.4
35	14.6	14.9	15.3	15.6	15.9	17.4	19.0	20.8
40	14.0	14.3	14.7	15.0	15.3	16.8	18.3	20.0
45	13.4	13.8	14.1	14.4	14.7	16.1	17.6	19.3
50	12.9	13.2	13.5	13.8	14.1	15.5	16.9	18.5
55	12.4	12.6	12.9	13.2	13.5	14.8	16.3	17.8
60	11.8	12.1	12.4	12.7	13.0	14.2	15.6	17.1
65	11.3	11.6	11.9	12.2	12.4	13.7	15.0	16.5
70	10.9	11.1	11.4	11.6	11.9	13.1	14.4	15.8
75	10.4	10.6	10.9	11.1	11.4	12.5	13.8	15.2
80	9.9	10.2	10.4	10.7	10.9	12.0	13.2	14.5
85	9.5	9.7	9.9	10.2	10.4	11.5	12.7	13.9
90	9.0	9.3	9.5	9.7	10.0	11.0	12.1	13.4
95	8.6	8.8	9.1	9.3	9.5	10.5	11.6	12.8
99	8.3	8.5	8.7	8.9	9.2	10.1	11.2	12.3

Source: Derived from PRIDE data files (CNRC, 2007).

Table 112. Probabilities (Percent) for RTC Attrition of National Guard Youth Challenge Program Recruits by Age and AFQT Percentile Score

	Probability of Attrition (Percent)							
AFQT Score	Age 17	Age 18	Age 19	Age 20	Age 21	Age 25	Age 29	Age 33
31	14.4	14.7	15.1	15.4	15.8	17.3	18.9	20.7
35	13.9	14.3	14.6	14.9	15.3	16.8	18.4	20.1
40	13.4	13.7	14.0	14.3	14.7	16.1	17.7	19.4
45	12.8	13.1	13.4	13.8	14.1	15.5	17.0	18.6
50	12.3	12.6	12.9	13.2	13.5	14.9	16.3	17.9
55	11.8	12.1	12.3	12.6	13.0	14.3	15.7	17.2
60	11.3	11.5	11.8	12.1	12.4	13.7	15.1	16.6
65	10.8	11.0	11.3	11.6	11.9	13.1	14.4	15.9
70	10.3	10.6	10.8	11.1	11.4	12.6	13.8	15.3
75	9.9	10.1	10.4	10.6	10.9	12.0	13.3	14.6
80	9.4	9.7	9.9	10.1	10.4	11.5	12.7	14.0
85	9.0	9.2	9.5	9.7	9.9	11.0	12.2	13.5
90	8.6	8.8	9.0	9.3	9.5	10.5	11.6	12.9
95	8.2	8.4	8.6	8.8	9.1	10.0	11.1	12.3
99	7.9	8.1	8.3	8.5	8.7	9.7	10.7	11.9

Source: Derived from PRIDE data files (CNRC, 2007).

Table 113. Probabilities (Percent) for RTC Attrition of Non-High School Graduate Recruits by Age and AFQT Percentile Score

	Probability of Attrition (Percent)							
AFQT Score	Age 17	Age 18	Age 19	Age 20	Age 21	Age 25	Age 29	Age 33
31	18.5	18.9	19.2	19.5	19.9	21.4	23.1	24.8
35	18.0	18.3	18.6	19.0	19.3	20.8	22.4	24.1
40	17.3	17.6	17.9	18.3	18.6	20.0	21.6	23.3
45	16.7	17.0	17.3	17.6	17.9	19.3	20.8	22.5
50	16.0	16.3	16.6	16.9	17.2	18.6	20.1	21.7
55	15.4	15.7	16.0	16.3	16.6	17.9	19.3	20.9
60	14.8	15.1	15.3	15.6	15.9	17.2	18.6	20.1
65	14.2	14.5	14.7	15.0	15.3	16.5	17.9	19.3
70	13.6	13.9	14.1	14.4	14.7	15.9	17.2	18.6
75	13.1	13.3	13.6	13.8	14.1	15.2	16.5	17.9
80	12.5	12.8	13.0	13.3	13.5	14.6	15.8	17.2
85	12.0	12.2	12.5	12.7	13.0	14.0	15.2	16.5
90	11.5	11.7	11.9	12.2	12.4	13.4	14.6	15.8
95	11.0	11.2	11.4	11.7	11.9	12.9	14.0	15.2
99	10.6	10.8	11.0	11.3	11.5	12.4	13.5	14.7

Source: Derived from PRIDE data files (CNRC, 2007).

Table 114. Probabilities (Percent) for RTC Attrition of 17-Year-Old Recruits by Education Credential and AFQT Percentile Score

	Percent Probability of Attrition										
AFQT Score	Mast. Degree	Bach. Degree	Assoc. Degree	HS Grad	Adult HS Grad	Sem. College	Home School	GED	Corr. Course	NGYCP	No Cred
31	5.1	6.7	8.1	10.5	14.4	14.0	18.2	17.5	15.1	14.4	18.5
35	4.9	6.4	7.8	10.1	14.0	13.6	17.6	17.0	14.6	13.9	18.0
40	4.7	6.1	7.5	9.6	13.4	13.0	17.0	16.3	14.0	13.4	17.3
45	4.4	5.8	7.1	9.2	12.8	12.5	16.3	15.7	13.4	12.8	16.7
50	4.2	5.5	6.8	8.8	12.3	12.0	15.7	15.1	12.9	12.3	16.0
55	4.0	5.2	6.4	8.4	11.8	11.5	15.1	14.5	12.4	11.8	15.4
60	3.8	5.0	6.1	8.0	11.3	11.0	14.5	13.9	11.8	11.3	14.8
65	3.5	4.7	5.8	7.6	10.8	10.5	13.9	13.4	11.3	10.8	14.2
70	3.3	4.5	5.5	7.3	10.3	10.0	13.4	12.8	10.9	10.3	13.6
75	3.2	4.2	5.2	6.9	9.9	9.6	12.8	12.3	10.4	9.9	13.1
80	3.0	4.0	5.0	6.6	9.4	9.1	12.3	11.8	9.9	9.4	12.5
85	2.8	3.8	4.7	6.2	9.0	8.7	11.8	11.3	9.5	9.0	12.0
90	2.6	3.6	4.4	5.9	8.6	8.3	11.3	10.8	9.0	8.6	11.5
95	2.5	3.4	4.2	5.6	8.2	7.9	10.8	10.3	8.6	8.2	11.0
99	2.4	3.2	4.0	5.4	7.9	7.6	10.4	9.9	8.3	7.9	10.6

Source: Derived from PRIDE data files (CNRC, 2007).

Table 115. Probabilities (Percent) for RTC Attrition of 18-Year-Old Recruits by Education Credential and AFQT Percentile Score

	Percent Probability of Attrition										
AFQT	Mast. Degree	Bach. Degree	Assoc. Degree	HS Grad	Adult HS Grad	Sem. College	Home School	GED	Corr. Course	NGYCP	No Cred
31	5.5	7.0	8.5	10.8	14.8	14.4	18.5	17.9	15.4	14.7	18.9
35	5.3	6.8	8.1	10.4	14.3	13.9	18.0	17.3	14.9	14.3	18.3
40	5.0	6.4	7.8	10.0	13.7	13.3	17.3	16.7	14.3	13.7	17.6
45	4.7	6.1	7.4	9.5	13.2	12.8	16.6	16.0	13.8	13.1	17.0
50	4.5	5.8	7.0	9.1	12.6	12.3	16.0	15.4	13.2	12.6	16.3
55	4.3	5.5	6.7	8.7	12.1	11.7	15.4	14.8	12.6	12.1	15.7
60	4.0	5.2	6.4	8.3	11.6	11.2	14.8	14.2	12.1	11.5	15.1
65	3.8	5.0	6.1	7.9	11.1	10.8	14.2	13.6	11.6	11.0	14.5
70	3.6	4.7	5.8	7.5	10.6	10.3	13.6	13.1	11.1	10.6	13.9
75	3.4	4.5	5.5	7.2	10.1	9.8	13.1	12.5	10.6	10.1	13.3
80	3.2	4.2	5.2	6.8	9.7	9.4	12.5	12.0	10.2	9.7	12.8
85	3.0	4.0	4.9	6.5	9.2	9.0	12.0	11.5	9.7	9.2	12.2
90	2.9	3.8	4.7	6.2	8.8	8.5	11.5	11.0	9.3	8.8	11.7
95	2.7	3.6	4.4	5.8	8.4	8.2	11.0	10.5	8.8	8.4	11.2
99	2.6	3.4	4.2	5.6	8.1	7.8	10.6	10.1	8.5	8.1	10.8

Source: Derived from PRIDE data files (CNRC, 2007).

Table 116. Probabilities (Percent) for RTC Attrition of 19-Year-Old Recruits by Education Credential and AFQT Percentile Score

	Percent Probability of Attrition										
AFQT	Mast. Degree	Bach. Degree	Assoc. Degree	HS Grad	Adult HS Grad	Sem. College	Home School	GED	Corr. Course	NGYCP	No Cred
31	5.8	7.4	8.8	11.1	15.1	14.7	18.9	18.2	15.7	15.1	19.2
35	5.6	7.1	8.5	10.8	14.6	14.2	18.3	17.7	15.3	14.6	18.6
40	5.3	6.8	8.1	10.3	14.0	13.7	17.6	17.0	14.7	14.0	17.9
45	5.0	6.4	7.7	9.8	13.5	13.1	17.0	16.3	14.1	13.4	17.3
50	4.8	6.1	7.3	9.4	12.9	12.6	16.3	15.7	13.5	12.9	16.6
55	4.5	5.8	7.0	9.0	12.4	12.0	15.7	15.1	12.9	12.3	16.0
60	4.3	5.5	6.7	8.6	11.9	11.5	15.1	14.5	12.4	11.8	15.3
65	4.1	5.2	6.3	8.2	11.3	11.0	14.5	13.9	11.9	11.3	14.7
70	3.9	5.0	6.0	7.8	10.9	10.5	13.9	13.3	11.4	10.8	14.1
75	3.7	4.7	5.7	7.4	10.4	10.1	13.3	12.8	10.9	10.4	13.6
80	3.5	4.5	5.4	7.1	9.9	9.6	12.8	12.2	10.4	9.9	13.0
85	3.3	4.2	5.2	6.7	9.5	9.2	12.2	11.7	9.9	9.5	12.5
90	3.1	4.0	4.9	6.4	9.0	8.8	11.7	11.2	9.5	9.0	11.9
95	2.9	3.8	4.6	6.1	8.6	8.4	11.2	10.7	9.1	8.6	11.4
99	2.8	3.6	4.4	5.8	8.3	8.1	10.8	10.4	8.7	8.3	11.0

Source: Derived from PRIDE data files (CNRC, 2007).

Table 117. Probabilities (Percent) for RTC Attrition of 20-Year-Old Recruits by Education Credential and AFQT Percentile Score

	Percent Probability of Attrition										
AFQT	Mast. Degree	Bach. Degree	Assoc. Degree	HS Grad	Adult HS Grad	Sem. College	Home School	GED	Corr. Course	NGYCP	No Cred
31	6.2	7.7	9.2	11.5	15.5	15.1	19.2	18.5	16.1	15.4	19.5
35	5.9	7.4	8.8	11.1	15.0	14.6	18.6	18.0	15.6	14.9	19.0
40	5.6	7.1	8.4	10.6	14.4	14.0	18.0	17.3	15.0	14.3	18.3
45	5.4	6.7	8.0	10.1	13.8	13.4	17.3	16.7	14.4	13.8	17.6
50	5.1	6.4	7.7	9.7	13.2	12.9	16.6	16.0	13.8	13.2	16.9
55	4.8	6.1	7.3	9.3	12.7	12.3	16.0	15.4	13.2	12.6	16.3
60	4.6	5.8	7.0	8.8	12.1	11.8	15.4	14.8	12.7	12.1	15.6
65	4.4	5.5	6.6	8.4	11.6	11.3	14.7	14.2	12.2	11.6	15.0
70	4.1	5.2	6.3	8.0	11.1	10.8	14.1	13.6	11.6	11.1	14.4
75	3.9	5.0	6.0	7.7	10.6	10.3	13.6	13.0	11.1	10.6	13.8
80	3.7	4.7	5.7	7.3	10.2	9.9	13.0	12.5	10.7	10.1	13.3
85	3.5	4.5	5.4	6.9	9.7	9.4	12.5	12.0	10.2	9.7	12.7
90	3.3	4.2	5.1	6.6	9.3	9.0	11.9	11.5	9.7	9.3	12.2
95	3.1	4.0	4.9	6.3	8.9	8.6	11.4	11.0	9.3	8.8	11.7
99	3.0	3.8	4.7	6.0	8.5	8.3	11.0	10.6	8.9	8.5	11.3

Source: Derived from PRIDE data files (CNRC, 2007).

Table 118. Probabilities (Percent) for RTC Attrition of 21-Year-Old Recruits by Education Credential and AFQT Percentile Score

	Percent Probability of Attrition										
AFQT	Mast. Degree	Bach. Degree	Assoc. Degree	HS Grad	Adult HS Grad	Sem. College	Home School	GED	Corr. Course	NGYCP	No Cred
31	6.5	8.1	9.5	11.8	15.8	15.4	19.6	18.9	16.5	15.8	19.9
35	6.3	7.8	9.2	11.4	15.3	14.9	19.0	18.3	15.9	15.3	19.3
40	6.0	7.4	8.8	11.0	14.7	14.3	18.3	17.7	15.3	14.7	18.6
45	5.7	7.1	8.4	10.5	14.1	13.8	17.6	17.0	14.7	14.1	17.9
50	5.4	6.7	8.0	10.0	13.5	13.2	16.9	16.3	14.1	13.5	17.2
55	5.2	6.4	7.6	9.6	13.0	12.6	16.3	15.7	13.5	13.0	16.6
60	4.9	6.1	7.2	9.1	12.4	12.1	15.6	15.1	13.0	12.4	15.9
65	4.6	5.8	6.9	8.7	11.9	11.6	15.0	14.5	12.4	11.9	15.3
70	4.4	5.5	6.6	8.3	11.4	11.1	14.4	13.9	11.9	11.4	14.7
75	4.2	5.2	6.2	7.9	10.9	10.6	13.8	13.3	11.4	10.9	14.1
80	4.0	5.0	5.9	7.6	10.4	10.1	13.3	12.8	10.9	10.4	13.5
85	3.8	4.7	5.6	7.2	10.0	9.7	12.7	12.2	10.4	9.9	13.0
90	3.6	4.5	5.4	6.9	9.5	9.2	12.2	11.7	10.0	9.5	12.4
95	3.4	4.2	5.1	6.5	9.1	8.8	11.7	11.2	9.5	9.1	11.9
99	3.2	4.1	4.9	6.3	8.7	8.5	11.3	10.8	9.2	8.7	11.5

Source: Derived from PRIDE data files (CNRC, 2007).

Table 119. Probabilities (Percent) for RTC Attrition of 25-Year-Old Recruits by Education Credential and AFQT Percentile Score

	Percent Probability of Attrition										
AFQT	Mast. Degree	Bach. Degree	Assoc. Degree	HS Grad	Adult HS Grad	Sem. College	Home School	GED	Corr. Course	NGYCP	No Cred
31	8.0	9.6	11.0	13.4	17.3	16.9	21.1	20.4	18.0	17.3	21.4
35	7.8	9.3	10.7	12.9	16.8	16.4	20.5	19.8	17.4	16.8	20.8
40	7.4	8.9	10.2	12.4	16.1	15.8	19.7	19.1	16.8	16.1	20.0
45	7.1	8.5	9.8	11.9	15.5	15.1	19.0	18.4	16.1	15.5	19.3
50	6.8	8.1	9.3	11.4	14.9	14.5	18.3	17.7	15.5	14.9	18.6
55	6.5	7.7	8.9	10.9	14.3	13.9	17.6	17.0	14.8	14.3	17.9
60	6.2	7.4	8.5	10.4	13.7	13.4	16.9	16.3	14.2	13.7	17.2
65	5.9	7.0	8.1	9.9	13.1	12.8	16.2	15.7	13.7	13.1	16.5
70	5.6	6.7	7.7	9.5	12.6	12.3	15.6	15.1	13.1	12.6	15.9
75	5.3	6.4	7.4	9.1	12.0	11.7	15.0	14.4	12.5	12.0	15.2
80	5.1	6.1	7.0	8.7	11.5	11.2	14.4	13.9	12.0	11.5	14.6
85	4.8	5.8	6.7	8.3	11.0	10.7	13.8	13.3	11.5	11.0	14.0
90	4.6	5.5	6.4	7.9	10.5	10.3	13.2	12.7	11.0	10.5	13.4
95	4.4	5.2	6.1	7.5	10.1	9.8	12.6	12.2	10.5	10.0	12.9
99	4.2	5.0	5.8	7.2	9.7	9.4	12.2	11.7	10.1	9.7	12.4

Source: Derived from PRIDE data files (CNRC, 2007).

Table 120. Probabilities (Percent) for RTC Attrition of 29-Year-Old Recruits by Education Credential and AFQT Percentile Score

	Percent Probability of Attrition										
AFQT	Mast. Degree	Bach. Degree	Assoc. Degree	HS Grad	Adult HS Grad	Sem. College	Home School	GED	Corr. Course	NGYCP	No Cred
31	9.7	11.2	12.7	15.0	19.0	18.6	22.7	22.1	19.6	18.9	23.1
35	9.4	10.9	12.3	14.5	18.4	18.0	22.1	21.4	19.0	18.4	22.4
40	9.0	10.4	11.8	13.9	17.7	17.3	21.3	20.6	18.3	17.7	21.6
45	8.6	10.0	11.3	13.4	17.0	16.7	20.5	19.9	17.6	17.0	20.8
50	8.2	9.6	10.8	12.8	16.4	16.0	19.8	19.1	16.9	16.3	20.1
55	7.9	9.1	10.3	12.3	15.7	15.4	19.0	18.4	16.3	15.7	19.3
60	7.5	8.7	9.9	11.8	15.1	14.7	18.3	17.7	15.6	15.1	18.6
65	7.2	8.4	9.5	11.3	14.5	14.1	17.6	17.0	15.0	14.4	17.9
70	6.9	8.0	9.0	10.8	13.9	13.6	16.9	16.4	14.4	13.8	17.2
75	6.6	7.6	8.6	10.3	13.3	13.0	16.2	15.7	13.8	13.3	16.5
80	6.3	7.3	8.3	9.9	12.7	12.4	15.6	15.1	13.2	12.7	15.8
85	6.0	7.0	7.9	9.4	12.2	11.9	14.9	14.4	12.7	12.2	15.2
90	5.7	6.6	7.5	9.0	11.7	11.4	14.3	13.8	12.1	11.6	14.6
95	5.4	6.3	7.2	8.6	11.2	10.9	13.7	13.3	11.6	11.1	14.0
99	5.2	6.1	6.9	8.3	10.8	10.5	13.3	12.8	11.2	10.7	13.5

Source: Derived from PRIDE data files (CNRC, 2007).

Table 121. Probabilities (Percent) for RTC Attrition of 33-Year-Old Recruits by Education Credential and AFQT Percentile Score

	Percent Probability of Attrition										
AFQT	Mast. Degree	Bach. Degree	Assoc. Degree	HS Grad	Adult HS Grad	Sem. College	Home School	GED	Corr. Course	NGYCP	No Cred
31	11.5	13.0	14.4	16.8	20.7	20.3	24.5	23.8	21.4	20.7	24.8
35	11.1	12.6	14.0	16.3	20.1	19.7	23.8	23.2	20.8	20.1	24.1
40	10.7	12.1	13.4	15.6	19.4	19.0	23.0	22.3	20.0	19.4	23.3
45	10.2	11.6	12.9	15.0	18.7	18.3	22.2	21.5	19.3	18.6	22.5
50	9.8	11.2	12.4	14.4	18.0	17.6	21.3	20.7	18.5	17.9	21.7
55	9.4	10.7	11.9	13.8	17.3	16.9	20.6	20.0	17.8	17.2	20.9
60	9.0	10.3	11.4	13.3	16.6	16.3	19.8	19.2	17.1	16.6	20.1
65	8.7	9.8	10.9	12.7	15.9	15.6	19.0	18.5	16.5	15.9	19.3
70	8.3	9.4	10.5	12.2	15.3	15.0	18.3	17.8	15.8	15.3	18.6
75	8.0	9.0	10.0	11.7	14.7	14.4	17.6	17.1	15.2	14.6	17.9
80	7.6	8.6	9.6	11.2	14.1	13.8	16.9	16.4	14.5	14.0	17.2
85	7.3	8.2	9.2	10.7	13.5	13.2	16.2	15.7	13.9	13.5	16.5
90	7.0	7.9	8.8	10.2	12.9	12.6	15.6	15.1	13.4	12.9	15.8
95	6.6	7.5	8.4	9.8	12.4	12.1	14.9	14.5	12.8	12.3	15.2
99	6.4	7.3	8.1	9.4	11.9	11.7	14.4	14.0	12.3	11.9	14.7

Source: Derived from PRIDE data files (CNRC, 2007).

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